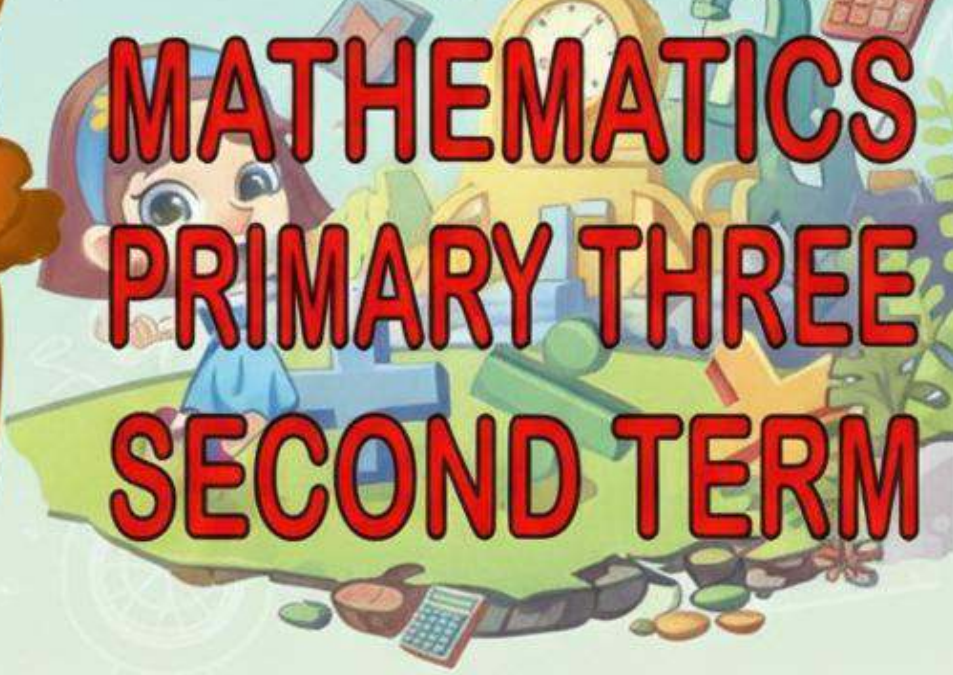
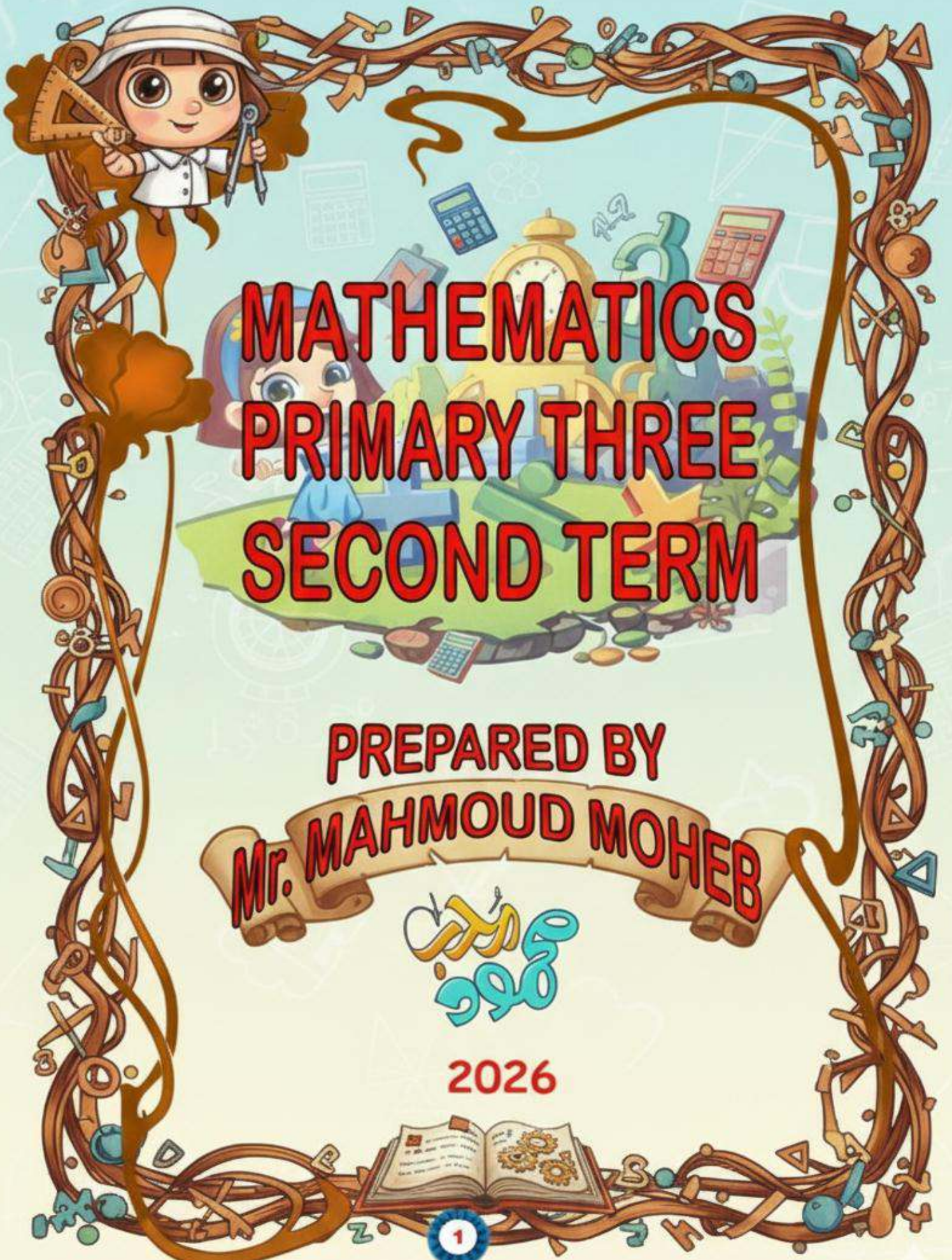


3rd prim 2nd term*



MATHEMATICS PRIMARY THREE SECOND TERM

PREPARED BY
Mr. MAHMOUD MOHEB



2026



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1	1	1	1	1	1	1	1	1	1	1	1
× 1	× 2	× 3	× 4	× 5	× 6	× 7	× 8	× 9	× 10	× 11	× 12
1	2	3	4	5	6	7	8	9	10	11	12

2	2	2	2	2	2	2	2	2	2	2	2
× 2	× 3	× 4	× 5	× 6	× 7	× 8	× 9	× 10	× 11	× 12	
4	6	8	10	12	14	16	18	20	22	24	

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× 3	× 4	× 5	× 6	× 7	× 8	× 9	× 10	× 11	× 12		
9	12	15	18	21	24	27	30	33	36		

4	4	4	4	4	4	4	4	4	4	4	4
× 4	× 5	× 6	× 7	× 8	× 9	× 10	× 11	× 12			
16	20	24	28	32	36	40	44	48			

5	5	5	5	5	5	5	5	5	5	5	5
× 5	× 6	× 7	× 8	× 9	× 10	× 11	× 12				
25	30	35	40	45	50	55	60				

6	6	6	6	6	6	6	6	6	6	6	6
× 6	× 7	× 8	× 9	× 10	× 11	× 12					
36	42	48	54	60	66	72					

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49	56	63	70	77	84						

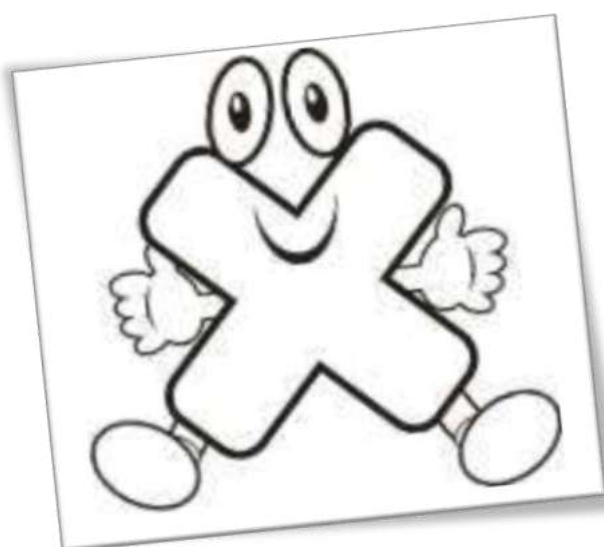
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64	72	80	88	96							

9	9	9	9	9	9	9	9	9	9	9	9
× 9	× 10	× 11	× 12								
81	90	99	108								

10	10	10	10	10	10	10	10	10	10	10	10
× 10	× 11	× 12									
100	110	120									

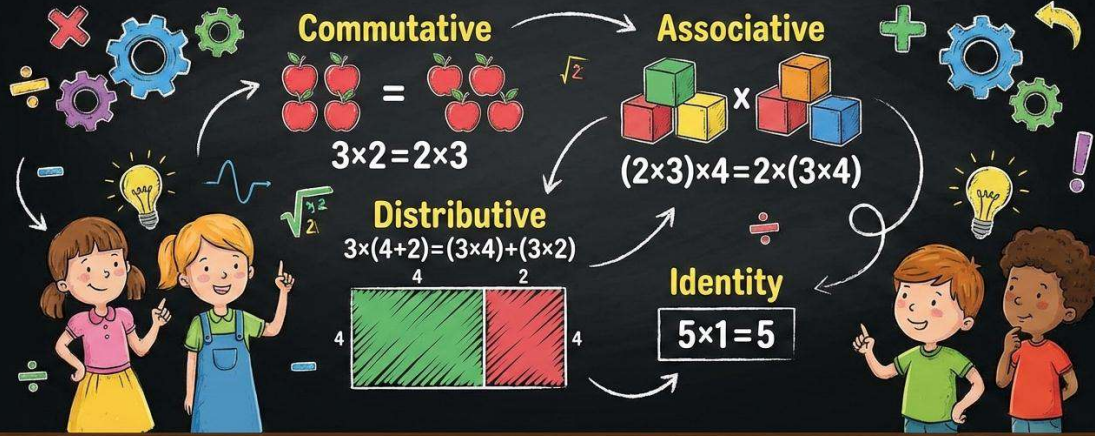
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× 11	× 12										
121	132										

12	12	12	12	12	12	12	12	12	12	12	12
× 12											
144											



CHAPTER (7)

Properties of Multiplication



Lesson (1)

Associative Property of Multiplication

Complete:

$$2 \times (5 \times 6) = \dots \times \dots = \dots$$

$$(2 \times 5) \times 6 = \dots \times \dots = \dots$$

$$2 \times (3 \times 4) = \dots \times \dots = \dots$$

$$(2 \times 3) \times 4 = \dots \times \dots = \dots$$

$$(2 \times 5) \times 9 = 2 \times (5 \times \dots)$$

$$(3 \times 4) \times 7 = 3 \times (4 \times \dots)$$

$$(\dots \times 7) \times 2 = 5 \times (7 \times 2)$$

$$(4 \times 6) \times 8 = 4 \times (\dots \times 8)$$



Find the product in two ways:

$$2 \times 10 \times 3$$

$$(2 \times 10) \times 3$$

$$= 20 \times 3$$

$$= 60$$

$$2 \times (10 \times 3)$$

$$= 2 \times 30$$

$$= 60$$

$$2 \times 20 \times 3$$

.....

.....

.....

.....

.....

.....

$$10 \times 3 \times 7$$

.....

.....

.....

.....

.....

.....

$$5 \times 2 \times 3$$

.....

.....

.....

.....

.....

.....

Circle the equations that have the same value:

A	$(9 \times 2) \times 5$	$9 \times (2 \times 5)$	11×5	9×10
B	$(4 \times 10) \times 3$	4×30	$4 \times (10 \times 3)$	4×13
C	$9 \times (3 \times 5)$	9×15	9×8	$9 \times (3 \times 5)$

Put the suitable sign (<), (>) or (=):



A	$(6 \times 5) \times 8$		$6 \times (5 \times 8)$
B	18×13		$(2 \times 6) \times 13$
C	$(15 \times 4) \times 11$		$15 \times (4 \times 11)$
D	$(25 \times 10) \times 4$		25×40

HOMEWORK

Complete:

$$4 \times (5 \times 2) = \dots \times \dots = \dots$$

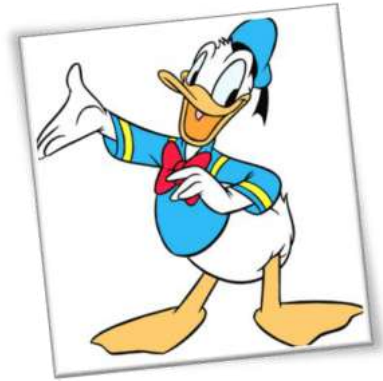
$$(4 \times 5) \times 2 = \dots \times \dots = \dots$$

$$(9 \times \dots) \times 3 = 9 \times (5 \times 3)$$

$$(4 \times \dots) \times 7 = 4 \times (5 \times \dots)$$

$$(2 \times 5) \times \dots = 2 \times (\dots \times 9)$$

$$(3 \times \dots) \times 2 = \dots \times (8 \times 2)$$



Find the product in two ways:

$$3 \times 10 \times 5$$

.....	
.....	
.....	

$$3 \times 6 \times 10$$

.....	
.....	
.....	

$$5 \times 10 \times 7$$

.....	
.....	
.....	

$$2 \times 7 \times 10$$

.....	
.....	
.....	

Circle the equations that have the same value:

A	$(10 \times 10) \times 4$	10×14	100×4	40×10
B	36×15	$(4 \times 9) \times 15$	$(3 \times 8) \times 15$	$36 \times (3 \times 5)$
C	$(5 \times 2) \times 8$	5×10	$5 \times (2 \times 8)$	10×8

Put the suitable sign (<), (>) or (=):



A	$(9 \times 2) \times 5$		135
B	$(3 \times 5) \times 6$		90
C	$(7 \times 3) \times 5$		24×5

Circle: agree (👍) or disagree (👎)

A	$(9 \times 2) \times 5$	<	135	☐	☐
B	$(3 \times 5) \times 6$	=	90	☐	☐
C	$(7 \times 3) \times 5$	<	24×5	☐	☐

$2 \times 6 = \square$

$2 \times 8 = \square$

$2 \times 5 = \square$

$2 \times 3 = \square$

$2 \times 1 = \square$

$2 \times 0 = \square$

$2 \times 4 = \square$

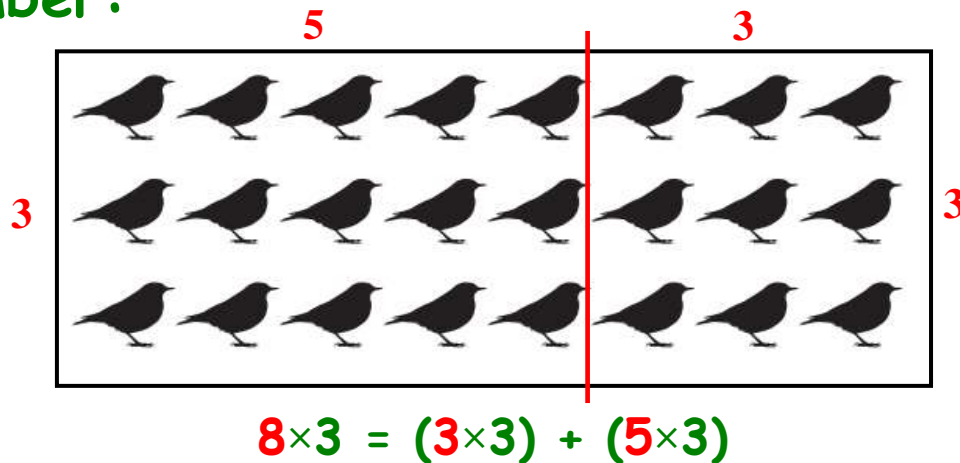
$2 \times 7 = \square$

$2 \times 2 = \square$

Lesson (2)

Distributive Property of Multiplication

Remember:



Example:

$$\begin{aligned}
 8 \times 13 &= 8 \times (10 + 3) \\
 &= (8 \times 10) + (8 \times 3) \\
 &= 80 + 24 \\
 &= 104
 \end{aligned}$$



$$\begin{aligned}
 5 \times 18 &= 5 \times (\text{.....} + \text{.....}) \\
 &= (5 \times \text{.....}) + (5 \times \text{.....}) \\
 &= \text{.....} + \text{.....} \\
 &= \text{.....}
 \end{aligned}$$

$$\begin{aligned}
 6 \times 14 &= 6 \times (\text{.....} + \text{.....}) \\
 &= (6 \times \text{.....}) + (6 \times \text{.....}) \\
 &= \text{.....} + \text{.....} \\
 &= \text{.....}
 \end{aligned}$$

$$\begin{aligned}
 3 \times 15 &= 3 \times (10 + \dots\dots\dots) \\
 &= (3 \times \dots\dots\dots) + (3 \times \dots\dots\dots) \\
 &= \dots\dots\dots + \dots\dots\dots \\
 &= \dots\dots\dots
 \end{aligned}$$



$$\begin{aligned}
 4 \times 9 &= 4 \times (\dots\dots\dots + \dots\dots\dots) \\
 &= (4 \times \dots\dots\dots) + (4 \times \dots\dots\dots) \\
 &= \dots\dots\dots + \dots\dots\dots \\
 &= \dots\dots\dots
 \end{aligned}$$



Write the distributive property equations of each.

a.

7	7	7	7	7	7	7	7
---	---	---	---	---	---	---	---

$$\begin{aligned}
 7 \times \dots\dots &= \dots\dots \times (\dots\dots + \dots\dots) \\
 &= (\dots\dots \times \dots\dots) + (\dots\dots \times \dots\dots)
 \end{aligned}$$

b.

5	5	5	5	5
---	---	---	---	---

$$\begin{aligned}
 \dots\dots \times \dots\dots &= \dots\dots \times (\dots\dots + \dots\dots) \\
 &= (\dots\dots \times \dots\dots) + (\dots\dots \times \dots\dots)
 \end{aligned}$$

Circle the equations that have the same value:

A	5×9	(5×2)+(5×5)	(5×2)+(5×7)	(5×3)+(5×6)
B	7×(4+5)	(7×4)+(7×5)	28+35	7×4×5
C	(5×3)+(5×7)	5×10	5×11	5×(3+7)
D	12×9	9×12	(9×2)+(9×10)	12+9

Circle: agree (👍) or disagree (👎):

A	$9 \times (7+3) = (9 \times 7) + (9 \times 3)$		
B	$(3 \times 10) \times 4 = 200$		
C	$2 \times (5+7) = (2 \times 5) + (2 \times 7)$		
D	$(5 \times 2) \times 7 = 10 \times 7$		

HOMEWORK

Complete:

$$\begin{aligned}
 6 \times 12 &= 6 \times (10 + \dots) \\
 &= (6 \times \dots) + (6 \times \dots) \\
 &= \dots + \dots \\
 &= \dots
 \end{aligned}$$



$$\begin{aligned}
 9 \times 15 &= 9 \times (\dots + \dots) \\
 &= (9 \times \dots) + (9 \times \dots) \\
 &= \dots + \dots \\
 &= \dots
 \end{aligned}$$

$$\begin{aligned}
 4 \times 17 &= 4 \times (10 + \dots\dots\dots) \\
 &= (4 \times \dots\dots\dots) + (4 \times \dots\dots\dots) \\
 &= \dots\dots\dots + \dots\dots\dots \\
 &= \dots\dots\dots
 \end{aligned}$$



c.

11	11	11	11	11	11
----	----	----	----	----	----

$$\begin{aligned}
 _____ \times _____ &= _____ \times (_____ + _____) \\
 &= (_____ \times _____) + (_____ \times _____)
 \end{aligned}$$

d.

8	8	8	8	8	8	8	8	8
---	---	---	---	---	---	---	---	---

$$\begin{aligned}
 _____ \times _____ &= _____ \times (_____ + _____) \\
 &= (_____ \times _____) + (_____ \times _____)
 \end{aligned}$$

e.

6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

$$\begin{aligned}
 _____ \times _____ &= _____ \times (_____ + _____) \\
 &= (_____ \times _____) + (_____ \times _____)
 \end{aligned}$$

$3 \times 7 = \square$

$3 \times 3 = \square$

$3 \times 4 = \square$

$3 \times 8 = \square$

$3 \times 2 = \square$

$3 \times 1 = \square$

$3 \times 5 = \square$

$3 \times 6 = \square$

$3 \times 0 = \square$

$3 \times 8 = \square$

$4 \times 5 = \square$

$3 \times 7 = \square$

$3 \times 4 = \square$

$3 \times 9 = \square$

$3 \times 6 = \square$

$4 \times 3 = \square$

$3 \times 1 = \square$

$4 \times 4 = \square$

Lesson (3)

Estimating Multiplication

Estimate the product and then find the actual solution:

5×19		Acceptable	Not-Acceptable
Estimation	Actual		
			

8×12		Acceptable	Not-Acceptable
Estimation	Actual		
			

5×11		Acceptable	Not-Acceptable
Estimation	Actual		
			

5×18		Acceptable	Not-Acceptable
Estimation	Actual		
			

Dalia had 8 baskets, each basket held 17 eggs. How many eggs did Dalia have in all?

8×17		Acceptable	Not-Acceptable
Estimation	Actual		
			

Amir had 4 boxes. In each box there were 2 dolls, and each doll had 3 buttons on its shirt. How many buttons were there?

$4 \times 2 \times 3$		Acceptable	Not-Acceptable
Estimation	Actual		
			

HOMEWORK

Estimation

8×12

Actual Solution

Estimation

13×9

Actual Solution

Estimation

$4 \times 7 \times 5$

Actual Solution

Estimation

$2 \times 6 \times 10$

Actual Solution

$5 \times 6 = \square$

$5 \times 8 = \square$

$5 \times 5 = \square$

$5 \times 3 = \square$

$5 \times 1 = \square$

$5 \times 0 = \square$

$5 \times 4 = \square$

$5 \times 7 = \square$

$5 \times 2 = \square$

Lesson (4)
Lesson (5)

Applications on Multiplication and Division
Strategies for Multiplication and Division

Equation : $15 \div 3 = \boxed{?}$

Think :

$$\begin{array}{ccccc} 5 & \times & 3 & = & 15 \\ \downarrow & & \downarrow & & \downarrow \\ \text{factor} & & \text{factor} & & \text{product} \end{array}$$

So,

$$\begin{array}{ccccc} 15 & \div & 3 & = & 5 \\ \downarrow & & \downarrow & & \downarrow \\ \text{dividend} & & \text{divisor} & & \text{quotient} \end{array}$$

Fill in the missing numbers of the following. Complete the fact family for each.

a. $5 \times 8 = 40$

$\text{---} \times 5 = 40$

$40 \div 8 = \text{---}$

$40 \div 5 = \text{---}$

b. $3 \times 9 = \text{---}$

$\text{---} \times 3 = 27$

$\text{---} \div 9 = 3$

$\text{---} \div 3 = 9$

c. $6 \times \text{---} = 42$

$7 \times \text{---} = 42$

$42 \div \text{---} = 6$

$\text{---} \div 6 = 7$

Complete.

a. $3 \times \text{---} = 21$

b. $\text{---} \times 4 = 24$

c. $18 \div 3 = \text{---}$

d. $35 \div 7 = \text{---}$

e. $\text{---} \div 6 = 10$

f. $56 \div \text{---} = 8$

Fill in the missing numbers of the following problems. Complete the fact family for each.

a. $4 \times 5 = 20$

$5 \times \text{---} = 20$

$20 \div 5 = \text{---}$

$\text{---} \div 4 = 5$

b. $3 \times 7 = \text{---}$

$7 \times 3 = \text{---}$

$\text{---} \div 7 = 3$

$\text{---} \div 3 = 7$

c. $1 \times \text{---} = 13$

$\text{---} \times 1 = 13$

$13 \div \text{---} = 1$

$13 \div 1 = \text{---}$

Complete the fact family.

a.

3

15

5

b.

35

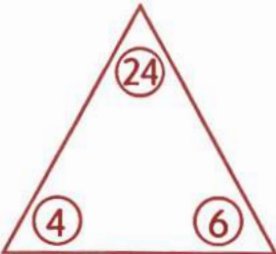
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5

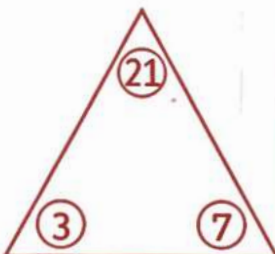
$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \end{array}$$

$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \end{array}$$

e.

$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \end{array}$$


f.

$$\begin{array}{l} \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \times \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \\ \underline{\quad} \div \underline{\quad} = \underline{\quad} \end{array}$$


Find the product of each of the following. Write the other multiplication equation.

a. $2 \times 4 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

b. $3 \times 8 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

c. $4 \times 8 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

d. $5 \times 3 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

e. $6 \times 2 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

f. $9 \times 7 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$



HOMEWORK

Complete.

a. $2 \times \underline{\quad} = 18$

b. $\underline{\quad} \times 8 = 24$

c. $40 \div 4 = \underline{\quad}$

d. $\underline{\quad} \div 9 = 6$

e. $45 \div \underline{\quad} = 5$

f. $36 \div \underline{\quad} = 6$

Fill in the missing numbers of the following problems. Complete the fact family for each.

a. $9 \times \underline{\quad} = 18$

$\underline{\quad} \times 9 = 18$

$18 \div \underline{\quad} = 9$

$18 \div 9 = \underline{\quad}$

b. $\underline{\quad} \times 6 = 24$

$6 \times \underline{\quad} = 24$

$24 \div 6 = \underline{\quad}$

$24 \div \underline{\quad} = 6$

c. $\underline{\quad} \times 10 = 80$

$10 \times \underline{\quad} = 80$

$80 \div \underline{\quad} = 10$

$80 \div 10 = \underline{\quad}$

Complete the fact family.

a. 4

3

12

b. 5

45

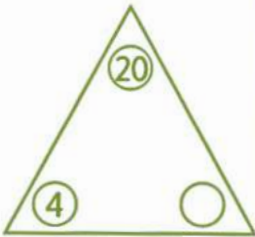
9

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

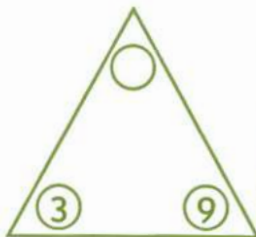
g.

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$



h.

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \times \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$
$\underline{\quad} \div \underline{\quad} = \underline{\quad}$



Find the quotient of each of the following. Write the other division equation.

a. $16 \div 2 = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

b. $50 \div 5 = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

c. $28 \div 4 = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

d. $40 \div 8 = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

e. $36 \div 9 = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

f. $42 \div 7 = \underline{\quad}$

$\underline{\quad} \div \underline{\quad} = \underline{\quad}$

Complete the missing numbers in each of the following.

a. $5 \times \underline{\quad} = 10$

$10 \div 5 = \underline{\quad}$

b. $7 \times \underline{\quad} = 21$

$21 \div 7 = \underline{\quad}$

c. $10 \times \underline{\quad} = 80$

$80 \div \underline{\quad} = 10$

d. $\underline{\quad} \times 7 = 14$

$14 \div 7 = \underline{\quad}$

e. $\underline{\quad} \times 6 = 54$

$54 \div 6 = \underline{\quad}$

f. $\underline{\quad} \times 7 = 49$

$49 \div \underline{\quad} = 7$

Complete the missing numbers in each of the following.

a. $36 \div 6 = \underline{\quad}$

$6 \times \underline{\quad} = 36$

b. $40 \div 5 = \underline{\quad}$

$5 \times \underline{\quad} = 40$

c. $56 \div 7 = \underline{\quad}$

$7 \times \underline{\quad} = 56$

d. $27 \div \underline{\quad} = 3$

$3 \times \underline{\quad} = 27$

e. $16 \div \underline{\quad} = 4$

$4 \times \underline{\quad} = 16$

f. $72 \div \underline{\quad} = 8$

$8 \times \underline{\quad} = 72$



Complete the fact family in each of the following group:

2 , 6 , 12

$$2 \times \dots = 12$$

$$6 \times \dots = 12$$

$$12 \div \dots = 6$$

$$\dots \div 6 = 2$$

5 , 9 , 45

$$5 \times \dots = 45$$

$$9 \times \dots = 45$$

$$45 \div \dots = 9$$

$$\dots \div 9 = 5$$



7 , 8 , 56

$$7 \times \dots = 56$$

$$8 \times \dots = 56$$

$$56 \div \dots = 7$$

$$\dots \div 8 = 7$$

4 , 10 , 40

$$4 \times \dots = 40$$

$$10 \times \dots = 40$$

$$40 \div \dots = 4$$

$$\dots \div 4 = 10$$



3 , 5 , 15

$$3 \times \dots = 15$$

$$5 \times \dots = 15$$

$$15 \div \dots = 3$$

$$\dots \div 3 = 5$$

5 , 7 , 35

$$5 \times \dots = 35$$

$$7 \times \dots = 35$$

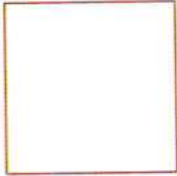
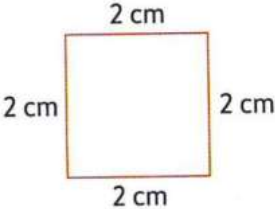
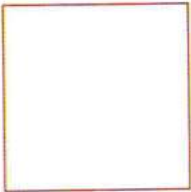
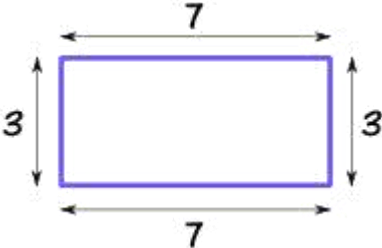
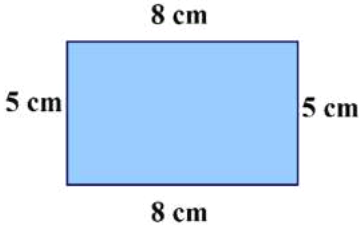
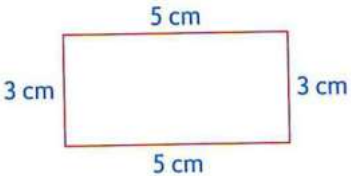
$$35 \div \dots = 7$$

$$\dots \div 7 = 5$$

Lesson (6)

Perimeter of Square and Rectangle

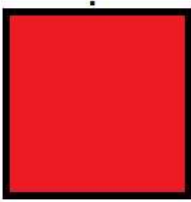
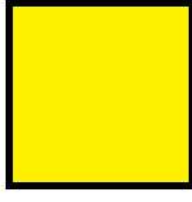
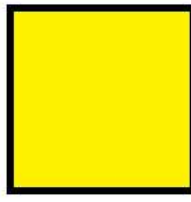
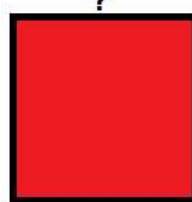
Find the perimeter of the following shapes:

 Perimeter = cm	 Perimeter = cm	 Perimeter = cm
 Perimeter = cm	 Perimeter = m	 Perimeter = cm

Find the length of the side marked by (?):

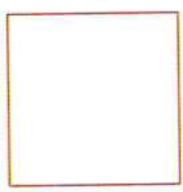
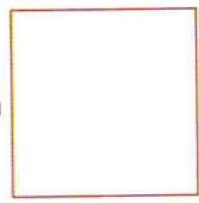
Perimeter = 16 cm 5 cm 	Perimeter = 20 cm 6 cm 
Perimeter = 12 cm ? 	Perimeter = 10 cm ? 

Find the length of the side marked by (?):

Perimeter = 20 cm ? 	Perimeter = 12 cm  ?
Perimeter = 16 cm  ?	Perimeter = 24 cm  ?

HOMEWORK

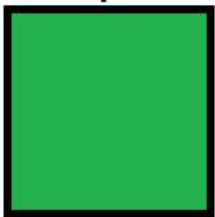
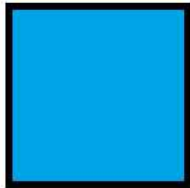
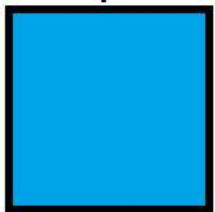
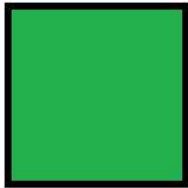
Find the perimeter of the following shapes:

6 cm  Perimeter = cm	2 cm 2 cm  2 cm Perimeter = cm	7 m  Perimeter = cm
7 3  3 7 Perimeter = cm	8 cm 5 cm  5 cm 8 cm Perimeter = m	5 cm 3 cm  3 cm 5 cm Perimeter = cm

Find the length of the side marked by (?):

Perimeter = 20 cm ?  3 cm	Perimeter = 24 cm 8 cm  ?
Perimeter = 18 cm 7 cm  ?	Perimeter = 14 cm 4 cm  ?

Find the length of the side marked by (?):

Perimeter = 8 cm ? 	Perimeter = 28 cm  ?
Perimeter = 36 cm ? 	Perimeter = 40 cm  ?

Choose the correct answer.

- a. The perimeter of the square whose side length is 6 cm = _____ cm
☐ 6 ☐ 12 ☐ 24 ☐ 36
- b. The perimeter of the square whose side length is 5 m = _____ m
☐ 10 ☐ 20 ☐ 50 ☐ 100
- c. The side length of the square whose perimeter is 12 cm = _____ cm
☐ 10 ☐ 8 ☐ 4 ☐ 3
- d. The side length of the square whose perimeter is 32 units = _____ units
☐ 16 ☐ 8 ☐ 4 ☐ 12
- e. The perimeter of the rectangle whose length is 5 cm and width is 3 cm equals _____ cm
☐ 8 ☐ 15 ☐ 16 ☐ 20
- f. The perimeter of the rectangle whose length is 9 cm and width is 7 cm equals _____ cm
☐ 2 ☐ 16 ☐ 63 ☐ 32
- g. The length of the rectangle whose width is 2 cm and perimeter is 10 cm equals _____ cm
☐ 8 ☐ 6 ☐ 5 ☐ 3
- h. The width of the rectangle whose length is 5 cm and perimeter is 16 cm equals _____ cm
☐ 9 ☐ 3 ☐ 8 ☐ 21
- i. The length of the rectangle whose width is 4 m and perimeter is 22 m equals _____ m
☐ 18 ☐ 14 ☐ 7 ☐ 9

Lesson (7)
Lesson (8)
Lesson (9)

Two-Step Story Problems

Strategies for solving Two-Step Story Problems

Writing Story Problems

Ali saves L.E. 20 weekly, in the fourth week he saves L.E. 10 only. How much money did he save?

.....

.....



Miss Salma orders 3 packs. Each pack has 6 markers. She gave 1 marker to each student in her class, she has 2 left. How many students in the class?

.....

.....



Bassem buys a box containing 18 pieces of fruits. The box includes an equal number of figs, bananas and oranges. He ate all the figs. How many pieces of fruits did he have left?

.....

.....



HOMEWORK

Laila buys 24 seeds. She has 5 pots. She want to plant 3 seeds in each pot. How many more pots does Laila need to plant all seeds?

.....

.....



Mr. Yassin had 52 pieces of fruit. He took 4 pieces for him and distributed the rest equally among 8 children.

How many pieces of fruit does each child get ?

.....

.....



Each day, Habiba eats 10 crackers for a snack at school. On Friday, she drops 3 crackers and only eats 7.

What is the total number of crackers that Habiba eats during the week?

.....

.....



Write and solve a two-step problem in the box and solve it.

.....

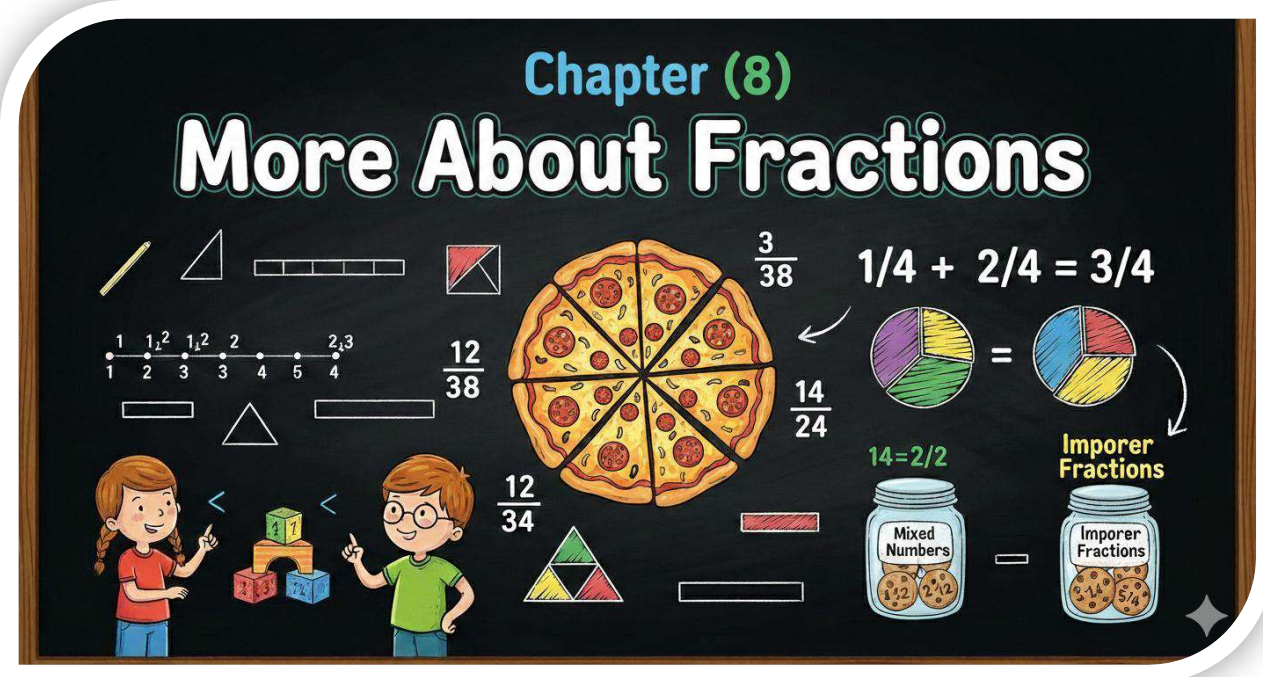
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Chapter (8)

More About Fractions

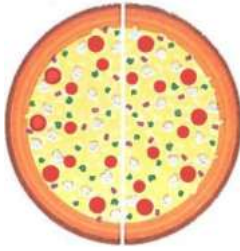


Lesson (1)
Lesson (2)

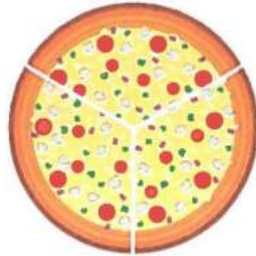
More Fractions
Exploring Unit Fractions

A	If 2 persons want to share a cookie fairly, circle the right image.	
B	If 3 persons want to share a cookie fairly, circle the right image.	
C	If 4 persons want to share a cookie fairly, circle the right image.	
D	Try to divide this cookie to share it fairly with 8 friends.	

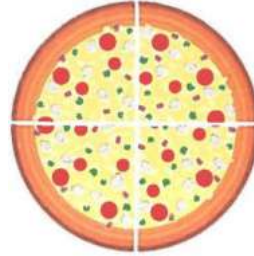
halves



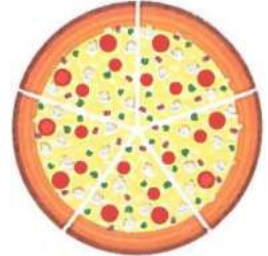
thirds



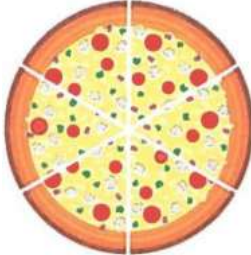
fourths



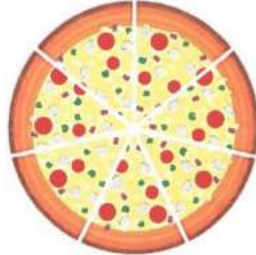
fifths



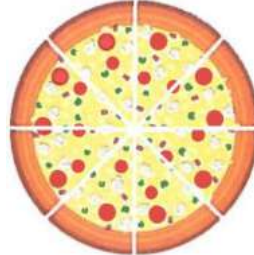
sixths



sevenths



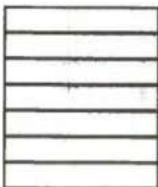
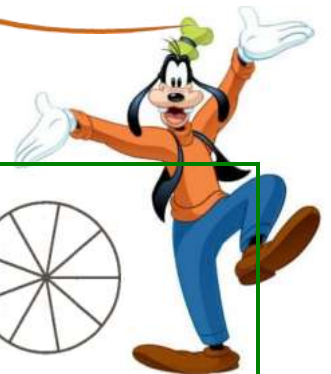
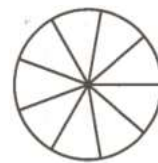
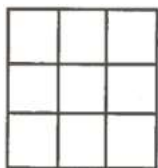
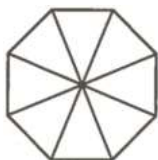
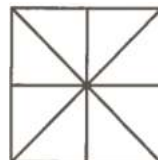
eighths



ninths



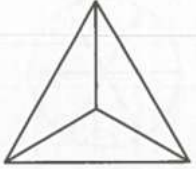
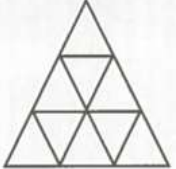
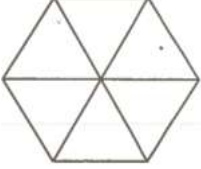
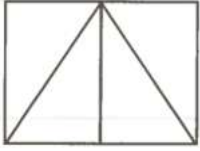
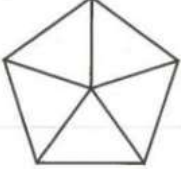
Join:

● **Sevenths** ●● **Ninths** ●● **Eighths** ●● **Sixths** ●

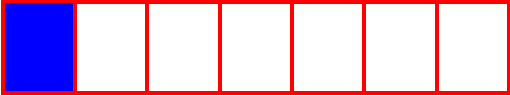
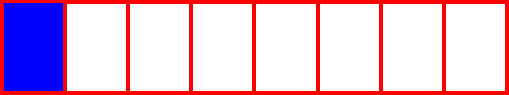
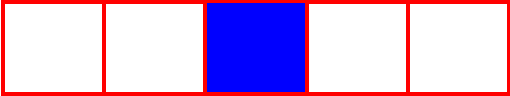
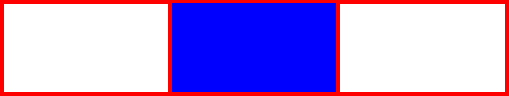
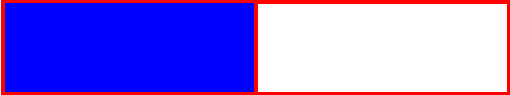
Read, trace then write:

$\frac{1}{2}$ half	$\frac{1}{3}$ third	$\frac{1}{4}$ fourth	$\frac{1}{5}$ fifth
half	third	fourth	fifth
half	third	fourth	fifth
$\frac{1}{6}$ sixth	$\frac{1}{7}$ seventh	$\frac{1}{8}$ eighth	$\frac{1}{9}$ ninth
sixth	seventh	eighth	ninth
sixth	seventh	eighth	ninth

Complete as the example:

 Thirds .....	.....	.....
 	 	

Choose the correct answer:

A	$\frac{1}{8}$		
B	$\frac{1}{5}$		
C	$\frac{1}{2}$		

Write the fraction:



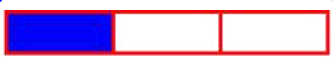
.....



.....



.....



.....



.....



.....

Write the fraction:

Seventh

....
....

Eighth

....
....

Sixth

....
....

Third

....
....

Fifth

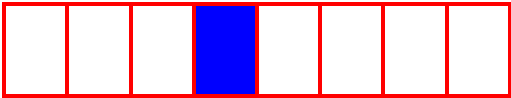
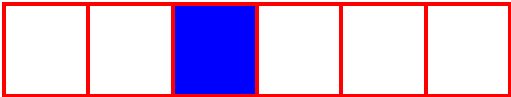
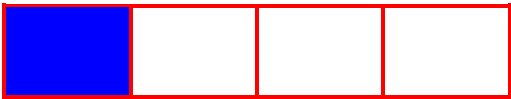
....
....

Ninth

....
....

HOMEWORK

Choose the correct answer:

A	$\frac{1}{9}$		
B	$\frac{1}{6}$		
C	$\frac{1}{3}$		

Write the fraction:



....
....



....
....



....
....

Write the fraction:

Fourth

....
....

Half

....
....

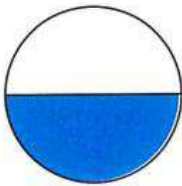
Tenth

....
....

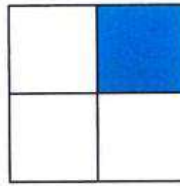


Write the fraction for the colored part of each shape.

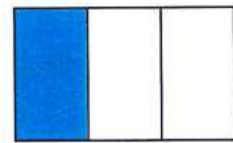
a.



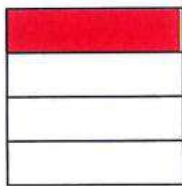
b.



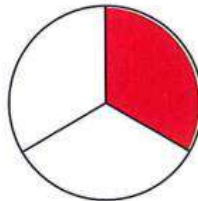
c.



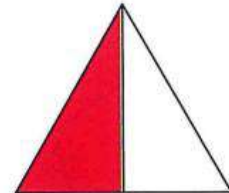
d.



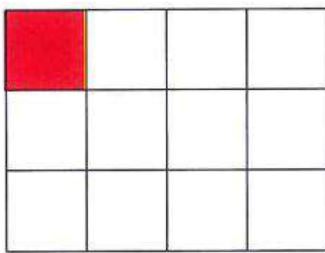
e.



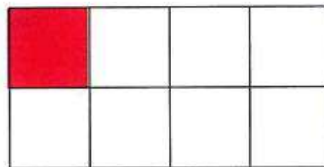
f.



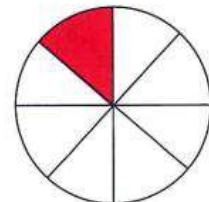
g.



h.



i.



Lesson (3)

Applications on Unit Fractions Using Models

Divide each clock into fractional parts as shown:



Halves



Thirds

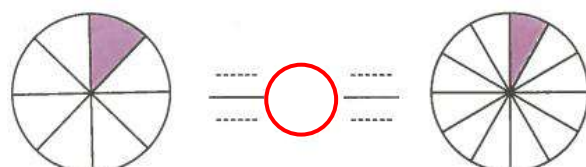
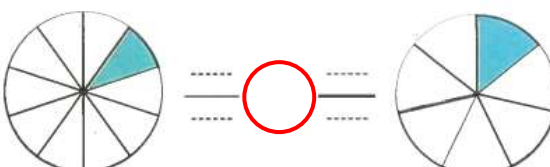
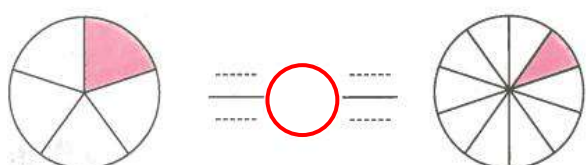
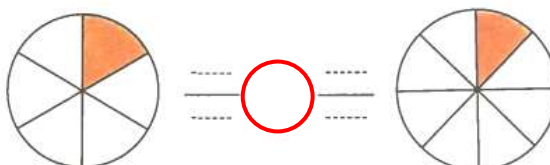
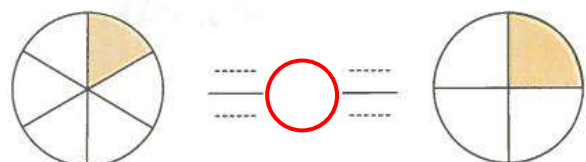
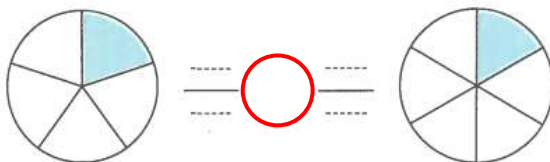
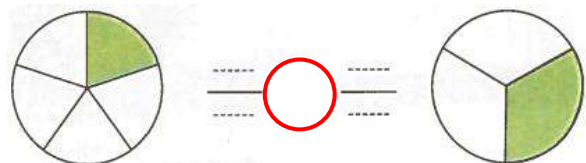
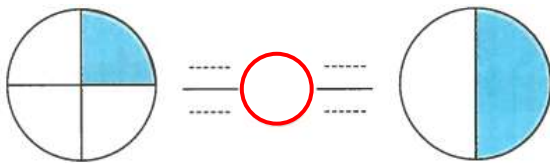


Fourths

Lesson (4)

Comparing Unit Fractions Using Models

Write the fraction, then put ($>$), ($<$) or ($=$):



Circle the **greater**:

$\frac{1}{5}$	$\frac{1}{2}$	$\frac{1}{3}$	1	$\frac{1}{4}$	$\frac{1}{7}$
$\frac{1}{10}$	$\frac{1}{8}$	$\frac{1}{6}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{6}$

Circle the **smaller**:

$\frac{1}{7}$	1	$\frac{1}{5}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{6}$
$\frac{1}{9}$	$\frac{1}{3}$	$\frac{1}{11}$	$\frac{1}{8}$	$\frac{1}{12}$	$\frac{1}{10}$

Put (>) or (<):

A	$\frac{1}{2}$	...	$\frac{1}{3}$	E	$\frac{1}{10}$	...	$\frac{1}{3}$
B	$\frac{1}{10}$	...	$\frac{1}{7}$	F	$\frac{1}{7}$	...	$\frac{1}{2}$
C	$\frac{1}{2}$	...	$\frac{1}{7}$	G	$\frac{1}{2}$	...	$\frac{1}{4}$

Circle: agree (👍) or disagree (👎):

A	$\frac{1}{2}$	$<$	$\frac{1}{3}$		
B	$\frac{1}{7}$	$>$	$\frac{1}{10}$		
C	$\frac{1}{2}$	$<$	$\frac{1}{7}$		

HOMEWORK

Circle the greater:

1	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{7}$	$\frac{1}{2}$	1
$\frac{1}{9}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{5}$	$\frac{1}{6}$

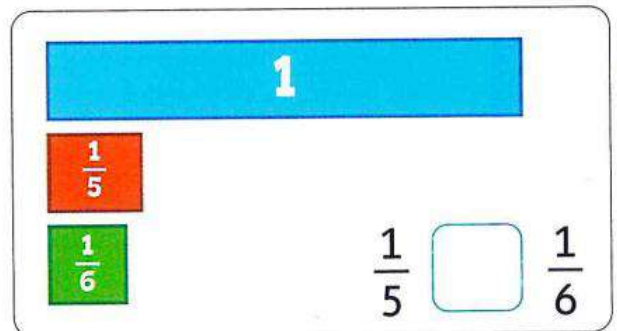
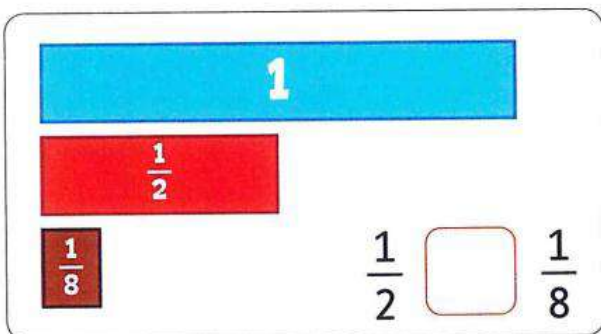
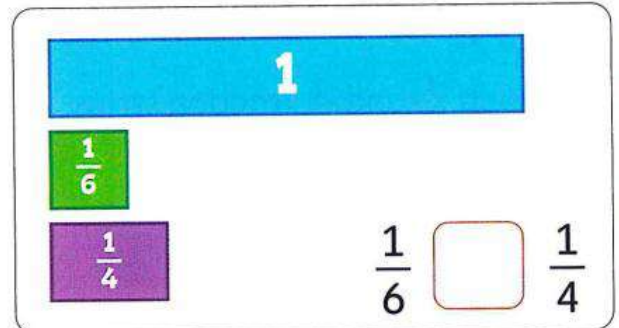
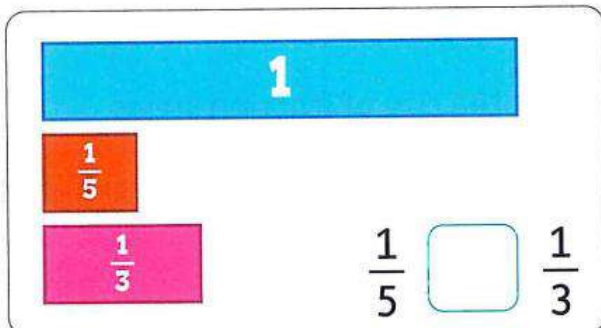
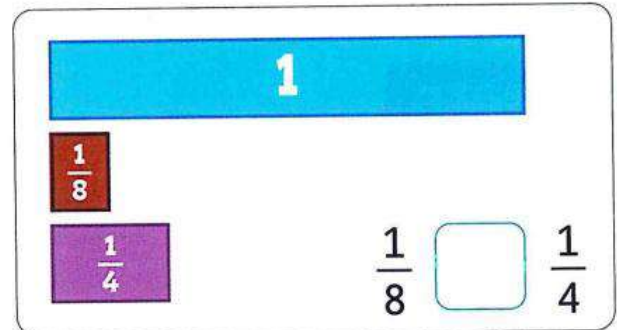
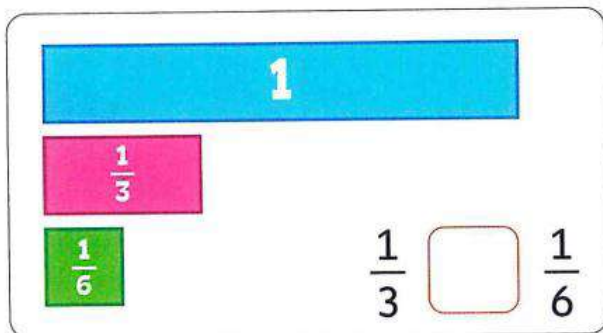
Circle the smaller:

$\frac{1}{4}$	$\frac{1}{5}$	1	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{7}$
$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{11}$	$\frac{1}{12}$	$\frac{1}{7}$	$\frac{1}{10}$

Put (>) or (<):

A	$\frac{1}{2}$	...	$\frac{1}{7}$	G	$\frac{1}{2}$	...	$\frac{1}{4}$
B	$\frac{1}{2}$	...	1	H	$\frac{1}{9}$	...	$\frac{1}{4}$

Compare. Write > or <. You may use fraction strips to help.



Lesson (5)

Which Is Bigger?



A.



B.

- ➔ Kamal likes to eat a lot of pie. His friend told him he could have $\frac{1}{2}$ of a pie (A) or $\frac{1}{2}$ of a pie (B). Which pie should Kamal choose if he wants to eat a lot of pie?



- ➔ Ali has 8 candies and Ahmed has 12 candies. Each of them ate $\frac{1}{2}$ of his candies.

Which of them ate more?



- ➔ Hoda and Mona donated with half of what they had, Hoda had L.E. 100 and Mona had L.E. 50.
Which of them donated less?

Circle the correct answer:

1. Which is longer: half of lunch time **or** half of Saturday?
2. Which is longer: half of a minute **or** half of an hour?
3. Which is more: half of an orange **or** half of a watermelon?
4. Which is more: half of a cookie **or** half of a cake?
5. Which is more: half of glass of water **or** half of swimming pool?
6. Which is more: half of a liter **or** half of a milliliter?

Lesson (6)

Expressing One Using Unit Fractions

Complete.

a. $1 = \frac{\quad}{3}$	b. $1 = \frac{7}{\quad}$	c. $1 = \frac{\quad}{9}$
d. $1 = \frac{8}{\quad}$	e. $1 = \frac{\quad}{6}$	f. $1 = \frac{13}{\quad}$
g. $1 = \frac{15}{\quad}$	h. $1 = \frac{10}{\quad}$	i. $1 = \frac{\quad}{20}$
j. $1 = \frac{17}{\quad}$	k. $1 = \frac{25}{\quad}$	l. $1 = \frac{\quad}{36}$

Answer the questions:

- ① How many **halves** in the whole one?
- ② How many **fourths** in the whole one?
- ③ How many **sevenths** in the whole one?
- ④ How many **thirds** in the whole one?

HOMEWORK

Put (✓) for the correct statment or (X) for the incorrect statment.

- Half of one piece of a lemon is more than half of one piece of an apple. ()
- Half of one piece of a watermelon is more than half of one piece of a mango. ()
- Half of a minute is less than a half of a day. ()
- Half of a bed is more than a half of chair. ()
- Half of one piece of a pizza is less than half of a cookie. ()

Circle the correct answers.

- Which is longer , half of a lunchtime or half of Saturday ?
- Which is longer , half of a minute or half of an hour ?
- Which is more , half of a cookie or half of a cake ?
- Which holds more , half of a glass for water or half of a swimming pool ?
- Which is more , half of a liter or half of a milliliter ?

Answer the questions:

- How many **ninths** in the whole one?
- How many **eighths** in the whole one?
- How many **sixths** in the whole one?
- How many **fifths** in the whole one?
- How many **tenths** in the whole one?

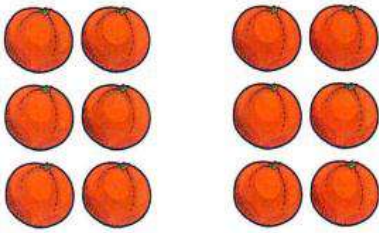
Complete:

$1 = \frac{\dots}{2}$	$1 = \frac{\dots}{7}$	$1 = \frac{8}{\dots} = \frac{\dots}{9}$
$\frac{12}{12} = \dots$	$\frac{11}{11} = \frac{7}{7} = \dots$	$\frac{5}{\dots} = 1 = \frac{\dots}{3}$

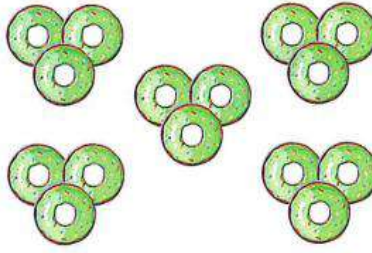
Lesson (7)

Relation between Fractions and Division

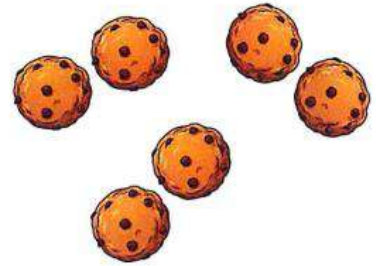
Solve. You may use counters or draw a picture to help.



$$\frac{1}{2} \text{ of } 12 = \underline{\hspace{2cm}}$$

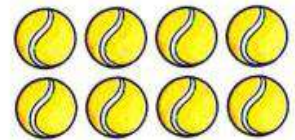


$$\frac{1}{5} \text{ of } 15 = \underline{\hspace{2cm}}$$



$$\frac{1}{3} \text{ of } 6 = \underline{\hspace{2cm}}$$

Use the counters to find $\frac{1}{2}$ of 8.



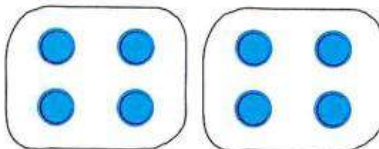
Use the counters to find $\frac{1}{3}$ of 18.



Lesson (8)

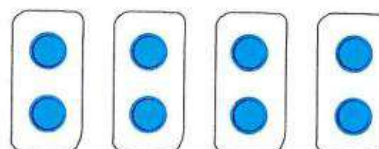
More of the Relation between Fractions and Division

Eight counters are divided into equal groups, complete.



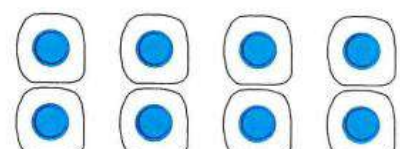
$$8 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

The fraction that
represents each group
is $\underline{\hspace{1cm}}$



$$8 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

The fraction that
represents each group
is $\underline{\hspace{1cm}}$



$$8 \div \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

The fraction that
represents each group
is $\underline{\hspace{1cm}}$

Compare, write $<$, $>$ or $=$.

a. $\frac{1}{6}$ of 24 $\frac{1}{4}$ of 12

c. $\frac{1}{2}$ of 8 $\frac{1}{3}$ of 21

e. $\frac{1}{9}$ of 9 $\frac{1}{5}$ of 10

g. $\frac{1}{4}$ of 36 $\frac{1}{6}$ of 60

b. $\frac{1}{3}$ of 18 $\frac{1}{5}$ of 25

d. $\frac{1}{7}$ of 28 $\frac{1}{8}$ of 32

f. $\frac{1}{6}$ of 12 $\frac{1}{3}$ of 6

h. $\frac{1}{8}$ of 48 $\frac{1}{2}$ of 16

Lesson (9)

Applications on Factions

Four friends bought a pizza to share equally. What fraction of the pizza will each friend get? "Write your answer as a division problem and as a fraction".

Omar bought a 6-pack of soda to give equally to his 6 guests. How many cans of soda will each guest receive ?

"Write your answer as a division problem and as a fraction of the 6-pack".



HOMEWORK

Solve. You may use counters or draw a picture to help.

a. Find $\frac{1}{2}$ of 18 _____ _____	b. Find $\frac{1}{7}$ of 21 _____ _____	c. Find $\frac{1}{4}$ of 8 _____ _____
d. Find $\frac{1}{3}$ of 9 _____ _____	e. Find $\frac{1}{6}$ of 18 _____ _____	f. Find $\frac{1}{4}$ of 16 _____ _____
g. Find $\frac{1}{8}$ of 24 _____ _____	h. Find $\frac{1}{5}$ of 25 _____ _____	i. Find $\frac{1}{3}$ of 27 _____ _____
j. Find $\frac{1}{4}$ of 24 _____ _____	k. Find $\frac{1}{6}$ of 6 _____ _____	l. Find $\frac{1}{4}$ of 36 _____ _____

Read and solve.

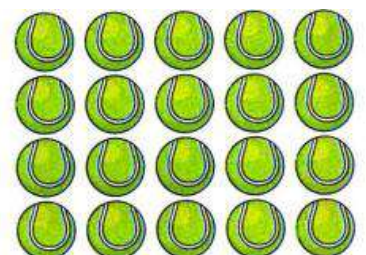
- a. Suppose you slept for $\frac{1}{3}$ of a day.
How much hours did you sleep ?



- b. Summer lasts for $\frac{1}{4}$ of the year.
How many months does summer last ?

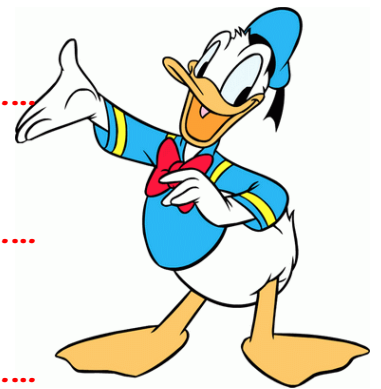


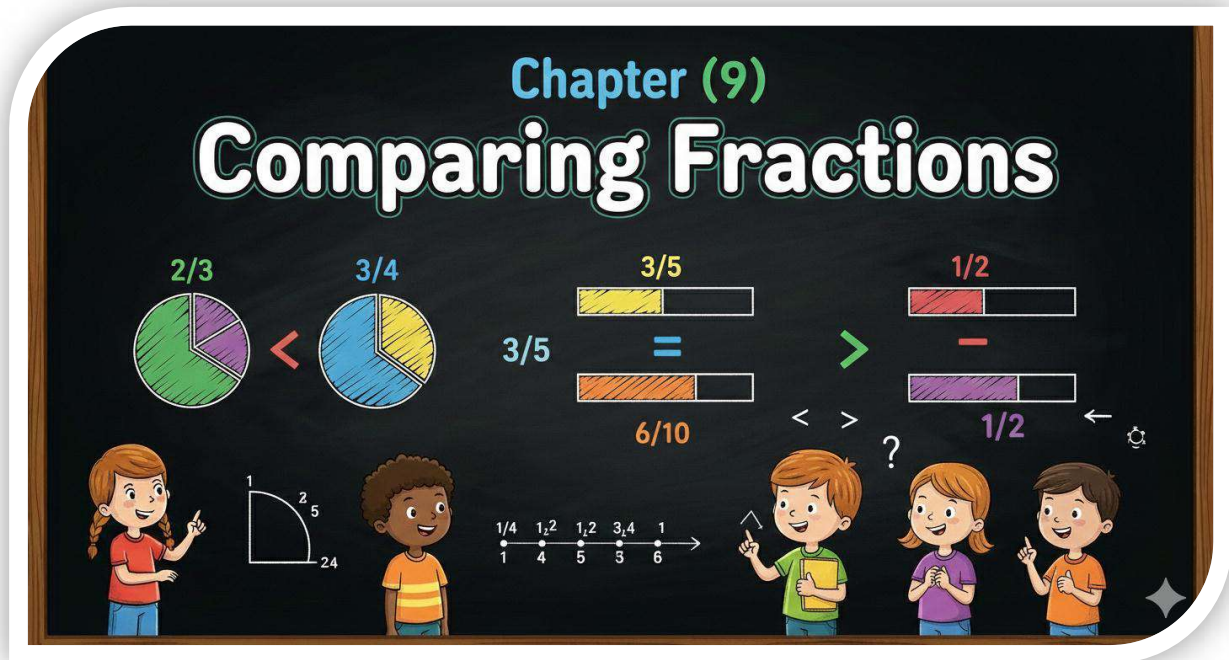
Use the counters to find $\frac{1}{4}$ of 20.



1. What is the **third** of **18** candies?
2. What is the **half** of **20** balloons?
3. What is the **fourth** of **16** pupils?
4. What is the **sixth** of **30** books?
5. What is the **ninth** of **18** marbles?
6. What is the **third** of **24** fish?
7. What is the **sixth** of **18** eggs?

-
1. What is the $\frac{1}{2}$ of 18?
 2. What is the $\frac{1}{4}$ of 20?
 3. What is the $\frac{1}{7}$ of 21?
 4. What is the $\frac{1}{3}$ of 15?
 5. What is the $\frac{1}{6}$ of 24?
 6. What is the $\frac{1}{9}$ of 72?
 7. What is the $\frac{1}{8}$ of 16?





Lesson (1)

Representing Fractions on a Number Line

Choose the correct answer:

Ali divides the pizza into 5 equal parts and gives her sister one part.

- ☐
- ☐
- ☐

Ahmed drinks half liter of juice after he playing a match.

- ☐
- ☐
- ☐

Rania walks $\frac{1}{4}$ km to the club with her friends.

- ☐
- ☐
- ☐

Hany distributed a pie among his three friends.

- ☐
- ☐
- ☐

Match:

Mona had a rope. She needed $\frac{1}{2}$ of it for a project.



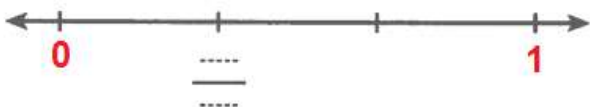
Omar had a meter of wood. He needed $\frac{1}{3}$ of the meter for a bird house.



Sara was sewing beads onto a meter of ribbon. She wanted to sew a bead on each $\frac{1}{4}$ of the ribbon.



Write the fraction on the number line:

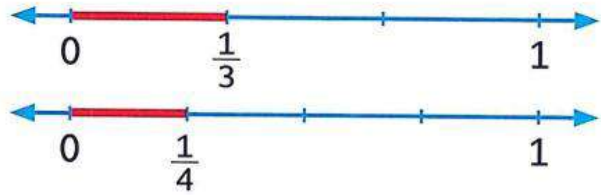


Lesson (2)

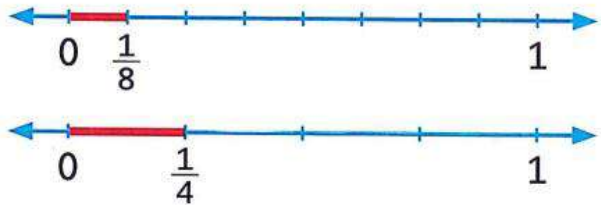
Comparing Unit Fractions Using a Number Line

Use the number lines to compare the fractions. Write $<$ or $>$.

$$\frac{1}{3} \quad \square \quad \frac{1}{4}$$



$$\frac{1}{8} \quad \square \quad \frac{1}{4}$$



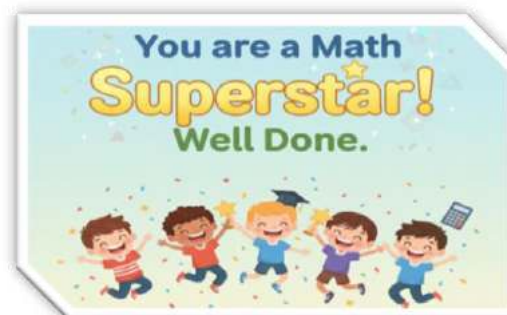
HOMEWORK

Use the number line to compare between two fractions. Write $<$ or $>$.

a. $\frac{1}{2} \quad \square \quad \frac{1}{4}$



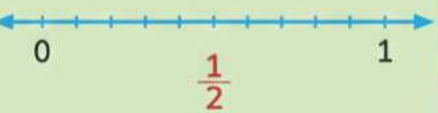
b. $\frac{1}{6} \quad \square \quad \frac{1}{3}$

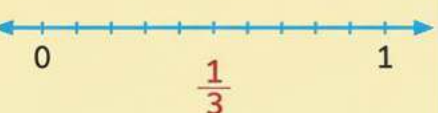


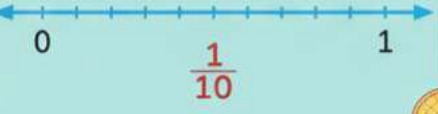
Represent and Compare Fractions

Represent each fraction on the number line, then compare using $<$, $>$ or $=$.

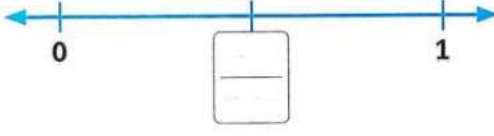
a.     

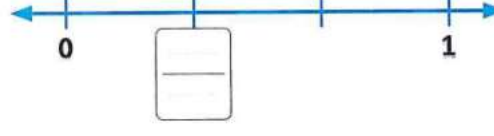
c.   

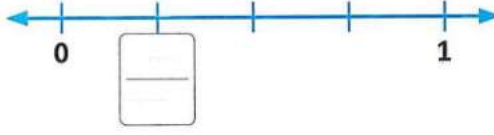
c.     

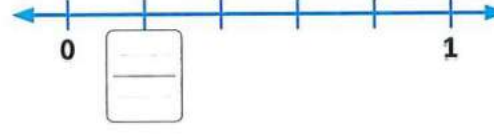
d.     

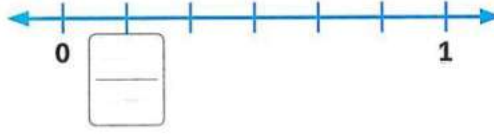
Write the fraction on the number line.

a. 

b. 

c. 

d. 

e. 

f. 

Circle the smaller fraction.

a. $\frac{1}{3}$, $\frac{1}{7}$

d. $\frac{1}{6}$, $\frac{1}{10}$

b. $\frac{1}{5}$, $\frac{1}{2}$

e. $\frac{1}{7}$, $\frac{1}{8}$

c. $\frac{1}{4}$, $\frac{1}{3}$

f. $\frac{1}{2}$, $\frac{1}{3}$

Compare using "< or >".

a. $\frac{1}{2}$ ○ $\frac{1}{3}$

d. $\frac{1}{3}$ ○ $\frac{1}{6}$

b. $\frac{1}{5}$ ○ $\frac{1}{4}$

e. $\frac{1}{8}$ ○ $\frac{1}{5}$

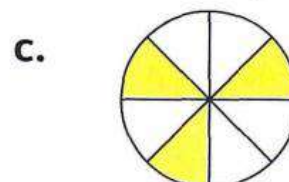
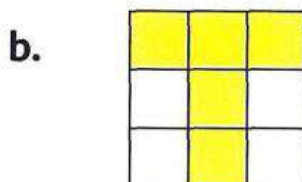
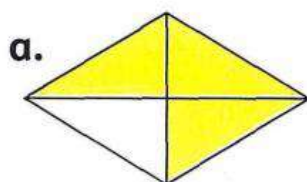
c. $\frac{1}{4}$ ○ $\frac{1}{7}$

f. $\frac{1}{10}$ ○ $\frac{1}{2}$

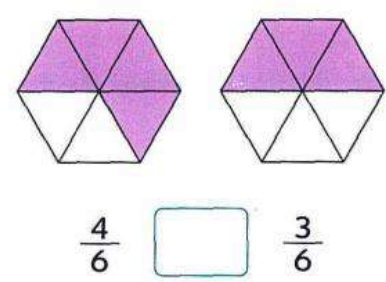
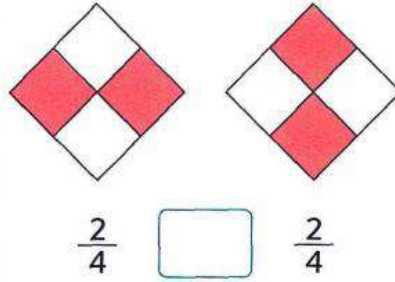
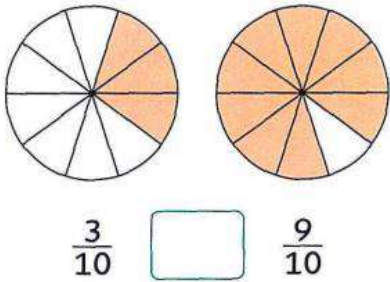
Lesson (3)

Comparing Fractions Using Models

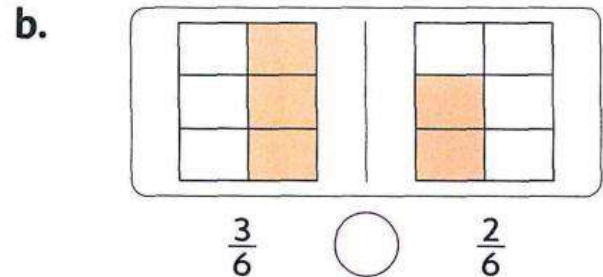
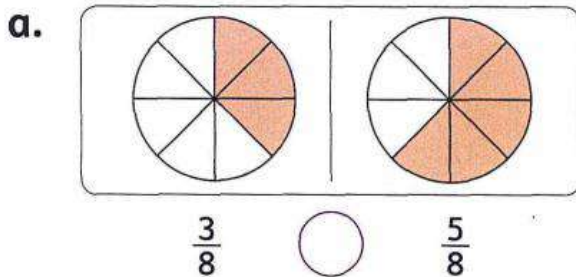
Write the fraction for the colored part of each of the following shapes.



Compare using ">,"=" or "<".



Compare using "< or >".

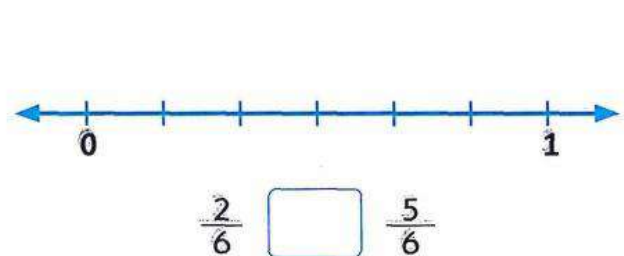
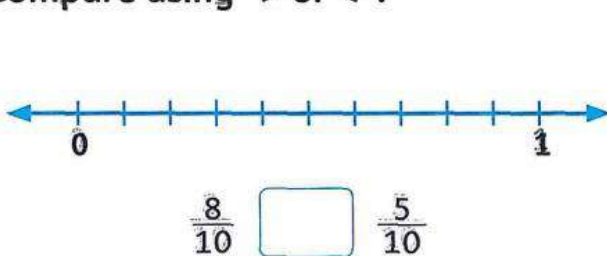


Lesson (4)

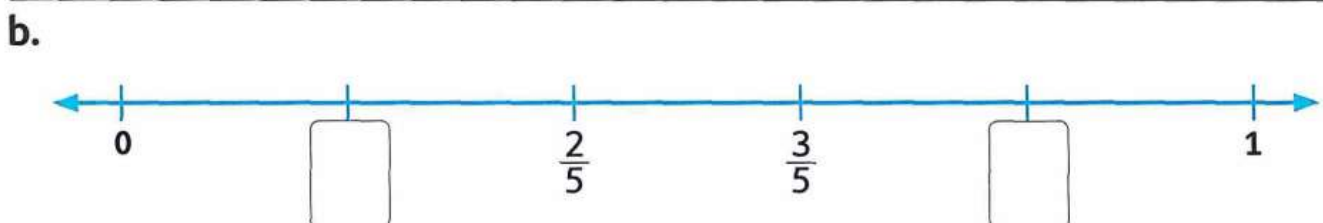
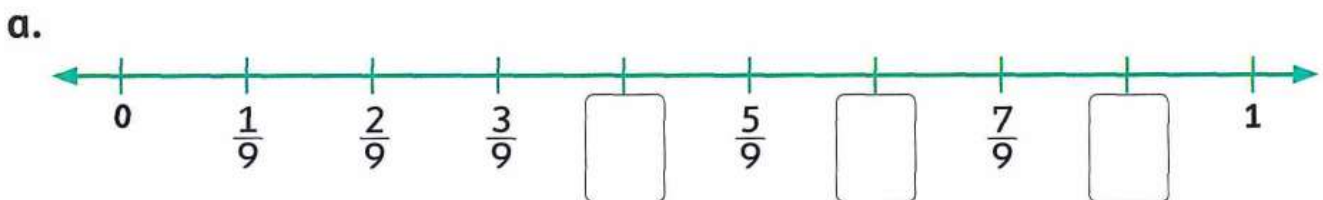
Comparing Fractions Using a Number Line

Locate a point to represent each fraction on the number line.

Compare using "> or <".

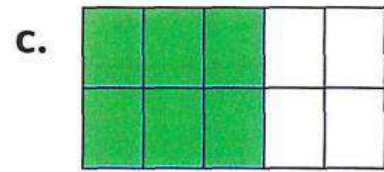
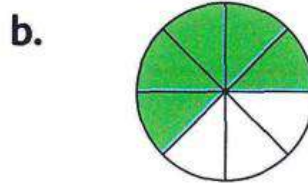
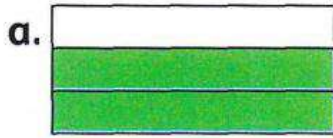


Complete the missing fractions in each number line.

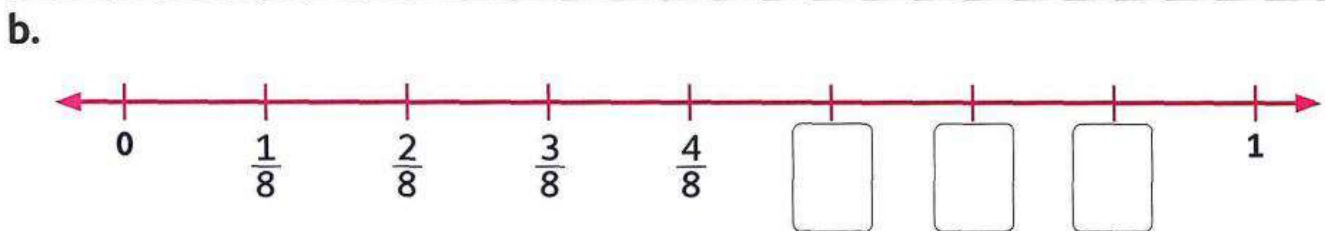
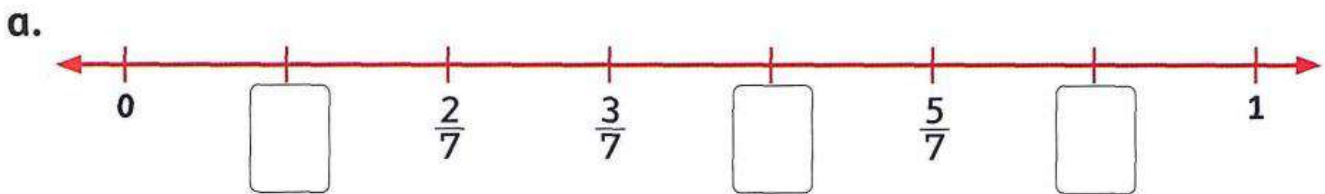


HOMEWORK

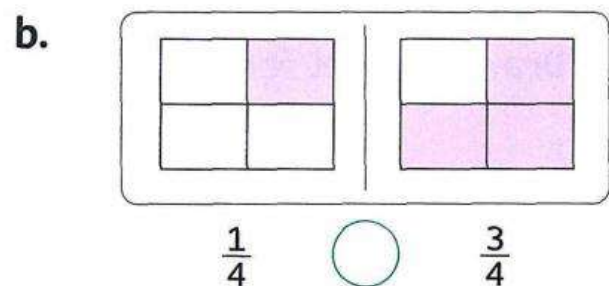
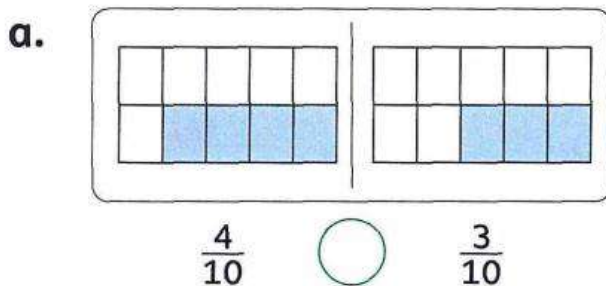
Write the fraction for the colored part of each of the following shapes.



Complete the missing fractions in each number line.

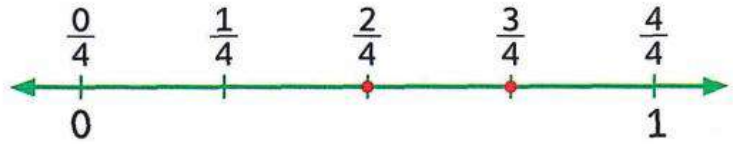


Compare using "< or >".

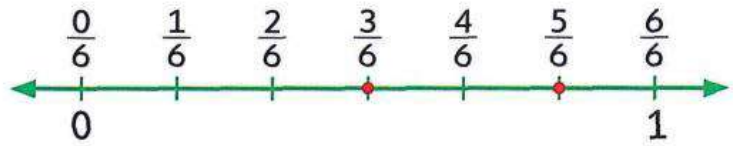


Compare using "< or >".

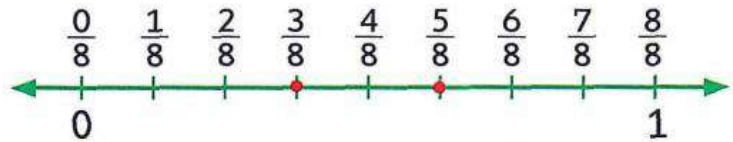
a. $\frac{3}{4} \bigcirc \frac{2}{4}$



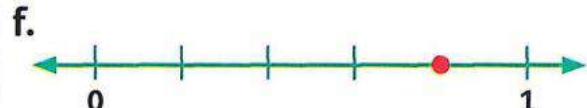
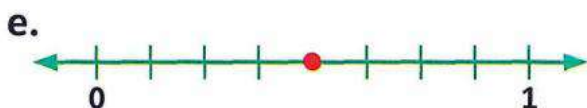
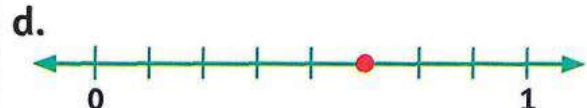
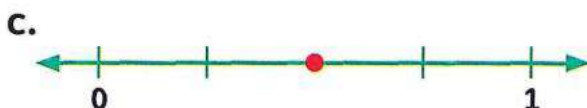
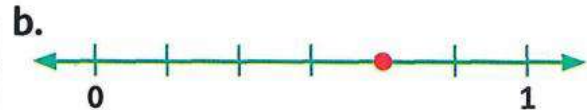
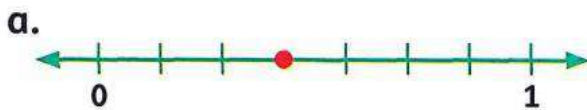
b. $\frac{3}{6} \bigcirc \frac{5}{6}$



c. $\frac{5}{8} \bigcirc \frac{3}{8}$



Write the fraction that names the point on each number line.

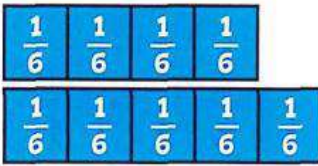


Lesson (5)

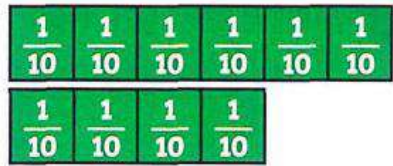
Comparing Two Fractions with the Same Numerator or Denominator

Compare. Write "< or >".

a. $\frac{4}{6} \bigcirc \frac{5}{6}$



b. $\frac{6}{10} \bigcirc \frac{4}{10}$



c. $\frac{3}{4} \bigcirc \frac{2}{4}$



d. $\frac{6}{9} \bigcirc \frac{7}{9}$



Circle the greater:

$\frac{2}{5}$	$\frac{3}{5}$	$\frac{4}{7}$	$\frac{3}{7}$	$\frac{4}{5}$	$\frac{3}{5}$
$\frac{2}{10}$	$\frac{1}{10}$	$\frac{4}{9}$	$\frac{5}{9}$	$\frac{3}{11}$	$\frac{5}{11}$

Circle the smaller:

$\frac{2}{5}$	$\frac{3}{5}$	$\frac{4}{5}$	$\frac{3}{5}$	$\frac{4}{7}$	$\frac{3}{7}$
$\frac{2}{10}$	$\frac{1}{10}$	$\frac{3}{11}$	$\frac{5}{11}$	$\frac{4}{9}$	$\frac{5}{9}$

Put (>) or (<):

A	$\frac{4}{5}$	...	$\frac{3}{5}$	C	$\frac{2}{5}$	...	$\frac{3}{5}$
B	$\frac{3}{11}$	...	$\frac{5}{11}$	D	$\frac{2}{10}$	...	$\frac{1}{10}$

Circle: agree (👍) or disagree (👎):

A	$\frac{4}{7}$	<	$\frac{3}{7}$	👍	👎
B	$\frac{4}{9}$	>	$\frac{5}{9}$	👍	👎

Compare. Write "< or >".

a.

$\frac{1}{5}$	$\frac{1}{5}$	$\frac{2}{5}$
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{2}{4}$

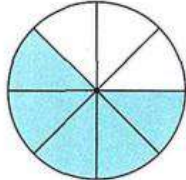
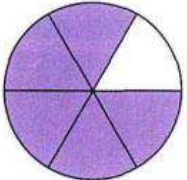
$\frac{2}{5} \bigcirc \frac{2}{4}$

b.

$\frac{0}{3}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$			
0			1			
$\frac{0}{6}$	$\frac{1}{6}$	$\frac{2}{6}$	$\frac{3}{6}$	$\frac{4}{6}$	$\frac{5}{6}$	$\frac{6}{6}$
0						1

$\frac{2}{3} \bigcirc \frac{2}{6}$

c.

	
---	---

$\frac{5}{8} \bigcirc \frac{5}{6}$

Circle the **greater**:

$\frac{2}{7}$	$\frac{2}{5}$	$\frac{4}{7}$	$\frac{4}{9}$	$\frac{3}{8}$	$\frac{3}{5}$
$\frac{2}{10}$	$\frac{2}{11}$	$\frac{5}{7}$	$\frac{5}{9}$	$\frac{3}{11}$	$\frac{3}{4}$

Circle the **smaller**:

$\frac{2}{7}$	$\frac{2}{5}$	$\frac{4}{7}$	$\frac{4}{9}$	$\frac{3}{8}$	$\frac{3}{5}$
$\frac{5}{8}$	$\frac{5}{6}$	$\frac{3}{7}$	$\frac{3}{5}$	$\frac{6}{7}$	$\frac{6}{11}$

Put (>) or (<):

A	$\frac{2}{7}$		$\frac{2}{5}$	C	$\frac{3}{8}$		$\frac{3}{5}$
B	$\frac{5}{8}$		$\frac{5}{6}$	D	$\frac{3}{11}$		$\frac{3}{4}$

Circle: agree (👍) or disagree (👎):

A	$\frac{4}{7}$		$\frac{4}{9}$		
B	$\frac{3}{7}$		$\frac{3}{5}$		

HOMEWORK

Circle the greater:

$\frac{3}{8}$	$\frac{5}{8}$	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{2}{7}$	$\frac{3}{7}$
$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{7}{12}$	$\frac{5}{12}$

Circle the smaller:

$\frac{3}{8}$	$\frac{5}{8}$	$\frac{2}{7}$	$\frac{3}{7}$	$\frac{1}{6}$	$\frac{5}{6}$
$\frac{1}{3}$	$\frac{2}{3}$	$\frac{7}{12}$	$\frac{5}{12}$	$\frac{1}{4}$	$\frac{3}{4}$

Put (>) or (<):

A	$\frac{2}{7}$		$\frac{3}{7}$	C	$\frac{3}{8}$		$\frac{5}{8}$
B	$\frac{7}{12}$		$\frac{5}{12}$	D	$\frac{1}{3}$		$\frac{2}{3}$

Circle: agree (👍) or disagree (👎):

A	$\frac{1}{6}$		$\frac{5}{6}$		
B	$\frac{1}{4}$		$\frac{3}{4}$		

Circle the **greater**:

$\frac{5}{8}$	$\frac{5}{6}$	$\frac{3}{7}$	$\frac{3}{5}$	$\frac{6}{7}$	$\frac{6}{11}$
$\frac{1}{3}$	$\frac{1}{8}$	$\frac{7}{9}$	$\frac{7}{10}$	$\frac{8}{9}$	$\frac{8}{11}$

Circle the **smaller**:

$\frac{1}{3}$	$\frac{1}{8}$	$\frac{7}{9}$	$\frac{7}{10}$	$\frac{8}{9}$	$\frac{8}{11}$
$\frac{2}{10}$	$\frac{2}{11}$	$\frac{5}{7}$	$\frac{5}{9}$	$\frac{3}{11}$	$\frac{3}{4}$

Put (>) or (<):

A	$\frac{1}{3}$		$\frac{1}{8}$	B	$\frac{6}{7}$		$\frac{6}{11}$
C	$\frac{2}{10}$		$\frac{2}{11}$	D	$\frac{8}{9}$		$\frac{8}{11}$

Circle: agree (👍) or disagree (👎):

A	$\frac{7}{9}$		$\frac{7}{10}$		
B	$\frac{5}{7}$		$\frac{5}{9}$		

Lesson (6)

Adding Two Fractions with the Same Denominator

Find each sum.

a. $\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} =$

$\frac{3}{6} + \frac{2}{6} =$

b. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$

$\frac{1}{4} + \frac{2}{4} =$

c. $\frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} =$

$\frac{4}{12} + \frac{3}{12} =$

Find each sum.

a. $\frac{1}{5} + \frac{1}{5} =$

b. $\frac{2}{10} + \frac{3}{10} =$

c. $\frac{1}{3} + \frac{2}{3} =$

d. $\frac{6}{12} + \frac{4}{12} =$

Lesson (7)

Subtracting Two Fractions with the Same Denominator

Find each difference.

a. $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} =$

$\frac{7}{8} - \frac{4}{8} =$

b. $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} =$

$\frac{4}{4} - \frac{1}{4} =$

c. $\frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} + \frac{1}{12} =$

$\frac{9}{12} - \frac{2}{12} =$

Find each difference.

a. $\frac{5}{8} - \frac{3}{8} =$

b. $\frac{2}{3} - \frac{1}{3} =$

c. $\frac{10}{12} - \frac{7}{12} =$

d. $\frac{6}{6} - \frac{3}{6} =$

Complete.

a. $\frac{2}{7} + \frac{\quad}{\quad} = \frac{5}{7}$

b. $\frac{7}{10} - \frac{\quad}{\quad} = \frac{2}{10}$

c. $\frac{\quad}{\quad} - \frac{3}{9} = \frac{1}{9}$

d. $\frac{\quad}{\quad} - \frac{2}{5} = \frac{3}{5}$

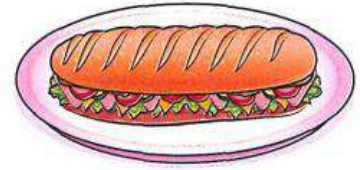
e. $\frac{6}{11} = \frac{\quad}{\quad} + \frac{5}{11}$

f. $\frac{3}{8} = \frac{\quad}{\quad} - \frac{2}{8}$

Lesson (8)

Story Problems on Adding and Subtracting Fractions

Mohamed ate $\frac{1}{6}$ of his sandwich at snack time and $\frac{2}{6}$ of his sandwich at lunch.



How much of his sandwich did he eat in all ?

Omar brought $\frac{2}{4}$ of a candy bar to the playground. He gave $\frac{1}{4}$ to his friend.

How much does he have left ?



Eman has $\frac{8}{8}$ meter of fabric.

She uses $\frac{6}{8}$ meter to make a pillow.

How much of the meter of fabric is left ?



The juice container at Farida's house was $\frac{5}{6}$ full.

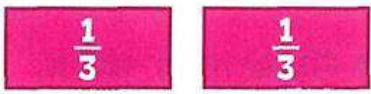
Farida drank $\frac{3}{6}$ of the container.

How much juice was left in the container ?



HOMEWORK

Find each sum.

a. 

$$\frac{1}{3} + \frac{1}{3} =$$

b. 

$$\frac{5}{8} + \frac{2}{8} =$$

c. 

$$\frac{2}{10} + \frac{1}{10} =$$

Find each difference.

a. 

$$\frac{3}{6} - \frac{2}{6} =$$

b. 

$$\frac{4}{5} - \frac{1}{5} =$$

c. 

$$\frac{9}{10} - \frac{2}{10} =$$

Find each sum.

a. $\frac{4}{6} + \frac{1}{6} =$ 

b. $\frac{1}{4} + \frac{3}{4} =$ 

c. $\frac{2}{8} + \frac{4}{8} =$ 

d. $\frac{5}{10} + \frac{2}{10} =$ 

Find each difference.

e. $\frac{5}{10} - \frac{2}{10} =$ 

f. $\frac{11}{12} - \frac{9}{12} =$ 

g. $\frac{7}{8} - \frac{1}{8} =$ 

h. $\frac{2}{4} - \frac{1}{4} =$ 

Choose the correct answer.

a. $\frac{3}{5} + \frac{1}{5} =$ _____

($\frac{2}{5}$ or $\frac{4}{5}$ or $\frac{4}{10}$)

b. $1 - \frac{2}{7} =$ _____

($\frac{3}{7}$ or $\frac{4}{7}$ or $\frac{5}{7}$)

c. $\frac{2}{12} + \frac{5}{12} =$ _____

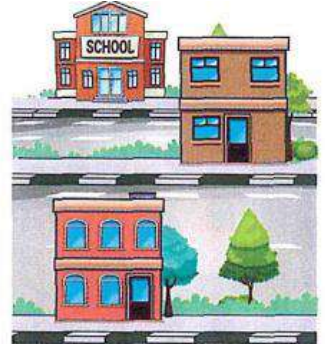
($\frac{7}{12}$ or $\frac{7}{24}$ or $\frac{12}{12}$)

Yesterday, Marawan ran $\frac{2}{8}$ of a kilometer and then stopped to drink some water. After his water break, he ran another $\frac{2}{8}$ of a kilometer.



What fraction of a kilometer did Marawan run yesterday ?

Wagdy's house is $\frac{2}{3}$ of a kilometer from school.
Taha's house is $\frac{1}{3}$ of a kilometer from school.



Who lives closer to school ?

Maha and Nagi baked cakes that were the same size.

Maha gave $\frac{3}{4}$ of her cake to her class.

Nagi gave $\frac{1}{2}$ of his cake to his class.



Which class received more cake, Maha's class or Nagi's class ?

Samir cut a pie into 8 equal slices.

He shared the pie with 5 of his friends.

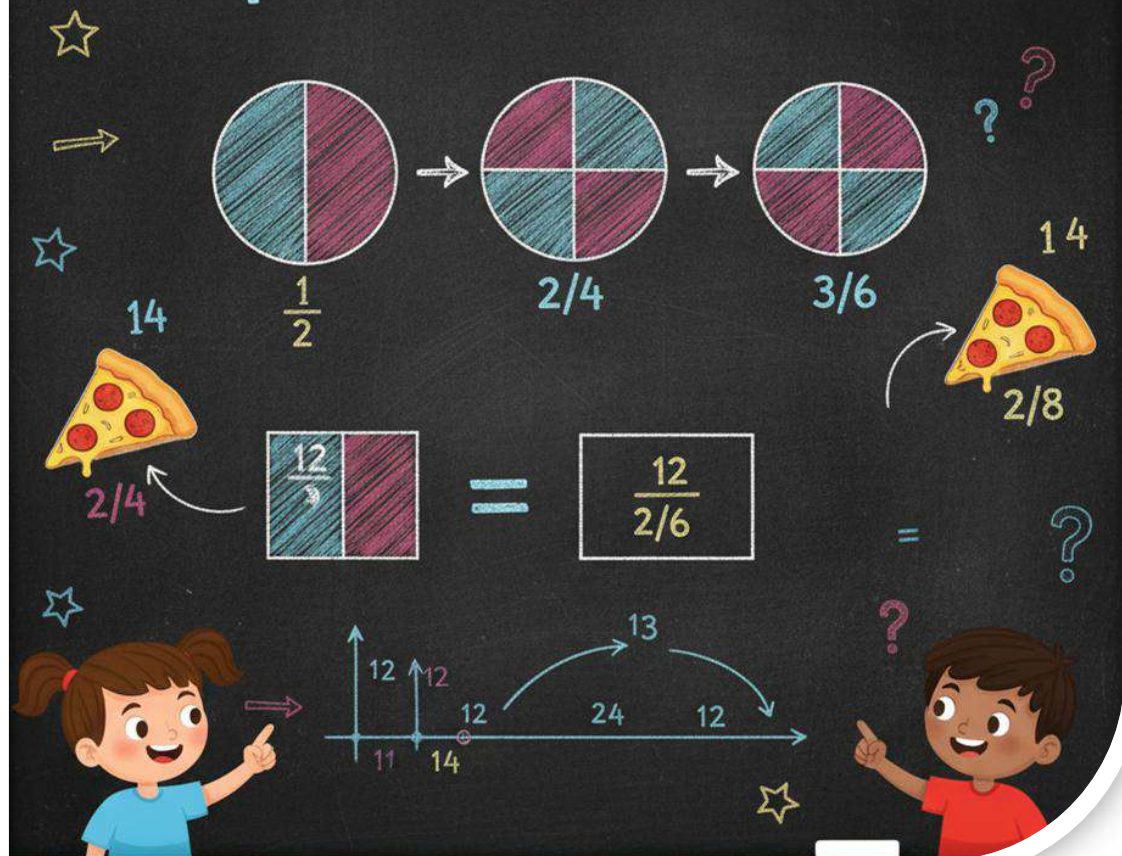
Samir and each of his friends ate 1 piece of the pie.

What fraction of the pie is left ?



Chapter (10)

Equivalent Fractions



Lesson (1)

Equivalent Fractions of a Half

Complete the number line, then write the fraction that is equivalent to $\frac{1}{2}$:

A. $\frac{1}{2} = \frac{\dots}{\dots}$



Number line from 0 to 1 with a tick mark at the midpoint. The midpoint is labeled with a fraction box $\frac{\dots}{\dots}$.

B. $\frac{1}{2} = \frac{\dots}{\dots}$



Number line from 0 to 1 with 5 equal intervals. Each interval is labeled with a fraction box $\frac{\dots}{\dots}$.

C. $\frac{1}{2} = \frac{\dots}{\dots}$



Number line from 0 to 1 with 10 equal intervals. Each interval is labeled with a fraction box $\frac{\dots}{\dots}$.

D. $\frac{1}{2} = \frac{\dots}{\dots}$



Number line from 0 to 1 with 12 equal intervals. Each interval is labeled with a fraction box $\frac{\dots}{\dots}$.

Complete.

a. $\frac{1}{2} = \frac{3}{\dots}$

b. $\frac{1}{2} = \frac{4}{\dots}$

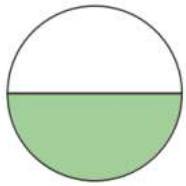
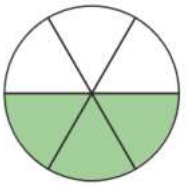
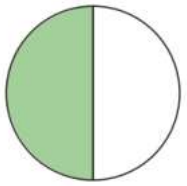
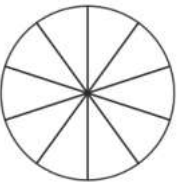
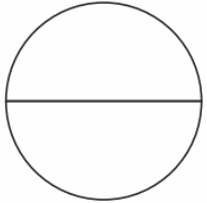
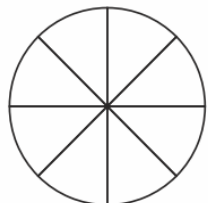
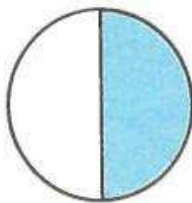
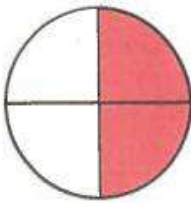
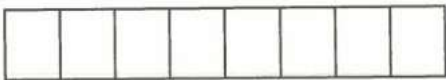
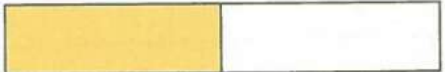
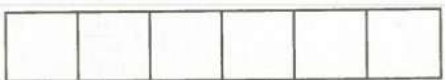
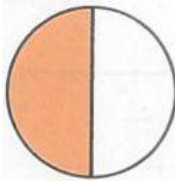
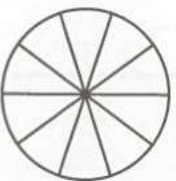
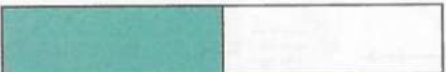
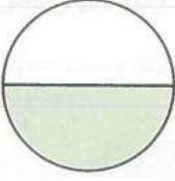
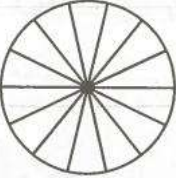
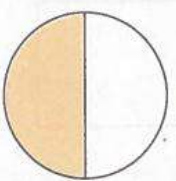
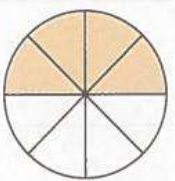
c. $\frac{1}{2} = \frac{\dots}{14}$

d. $\frac{1}{2} = \frac{8}{\dots}$

e. $\frac{1}{2} = \frac{\dots}{12}$

f. $\frac{1}{2} = \frac{\dots}{20}$

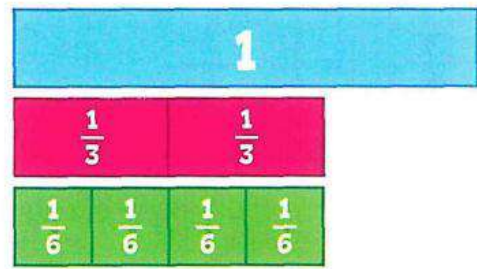
Color, then complete as the example:

  $\frac{1}{2} = \frac{3}{6}$	  $\frac{1}{2} = \frac{\dots}{\dots}$
  $\frac{1}{2} = \frac{\dots}{\dots}$	  $\frac{1}{2} = \frac{\dots}{\dots}$
  $\frac{1}{2} = \frac{\dots}{\dots}$	  $\frac{1}{2} = \frac{\dots}{\dots}$
  $\frac{1}{2} = \frac{\dots}{\dots}$	  $\frac{1}{2} = \frac{\dots}{\dots}$
  $\frac{1}{2} = \frac{\dots}{\dots}$	  $\frac{1}{2} = \frac{\dots}{\dots}$

Lesson (2)

More of Equivalent Fractions

What fraction is equivalent to $\frac{2}{3}$?



Complete to find equivalent fractions.

a. $\frac{1}{3} = \frac{\quad}{\quad}$

$\times 4$ (top arrow) and $\times 4$ (bottom arrow)

b. $\frac{1}{4} = \frac{\quad}{\quad}$

$\times 3$ (top arrow) and $\times 3$ (bottom arrow)

c. $\frac{2}{5} = \frac{\quad}{\quad}$

$\times 5$ (top arrow) and $\times 5$ (bottom arrow)

Complete.

a. $\frac{1}{5} = \frac{\quad}{10}$

b. $\frac{2}{3} = \frac{\quad}{9}$

c. $\frac{2}{4} = \frac{1}{\quad}$

d. $\frac{\quad}{4} = \frac{6}{8}$

e. $\frac{1}{4} = \frac{\quad}{20}$

f. $\frac{3}{6} = \frac{\quad}{2}$

g. $\frac{\quad}{6} = \frac{10}{12}$

h. $\frac{2}{7} = \frac{\quad}{14}$

i. $\frac{8}{10} = \frac{4}{\quad}$

j. $\frac{4}{6} = \frac{\quad}{18}$

k. $\frac{4}{6} = \frac{\quad}{3}$

l. $1 = \frac{12}{\quad}$



Lesson (3)

Patterns of Equivalent Fractions

Complete the fraction and describe each of the following patterns.
The first one is done for you.

$$\boxed{\frac{1}{3}} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$$

Description of the pattern : **The numerator increases by 1 and the denominator increases by 3.**

a. $\boxed{\frac{1}{4}} = \frac{\quad}{8} = \frac{\quad}{12} = \frac{4}{\quad}$

Description of the pattern : _____

b. $\boxed{\frac{2}{3}} = \frac{\quad}{6} = \frac{6}{\quad} = \frac{\quad}{12}$

Description of the pattern : _____

Write two equivalent fractions to each fraction.

a. $\frac{2}{3} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

b. $\frac{4}{12} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

c. $\frac{4}{6} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

d. $\frac{4}{10} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

Choose the correct answer.

a. $\frac{2}{5} = \frac{\quad}{\quad}$ ($\frac{2}{10}$ or $\frac{6}{15}$ or $\frac{4}{5}$ or $\frac{6}{20}$)

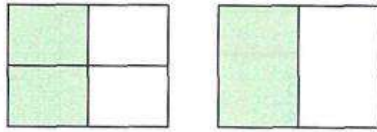
b. $\frac{6}{16} = \frac{\quad}{\quad}$ ($\frac{2}{4}$ or $\frac{12}{30}$ or $\frac{6}{6}$ or $\frac{3}{8}$)

c. $\frac{4}{12} = \frac{\quad}{\quad}$ ($\frac{1}{4}$ or $\frac{12}{24}$ or $\frac{8}{24}$ or $\frac{8}{12}$)

HOMEWORK

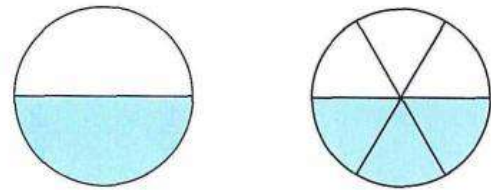
Record what fraction each model shows.

a.



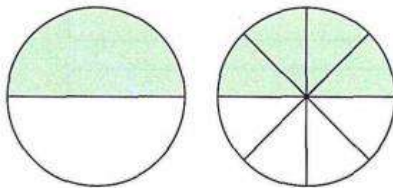
$$\frac{\quad}{\quad} = \frac{\quad}{\quad}$$

b.



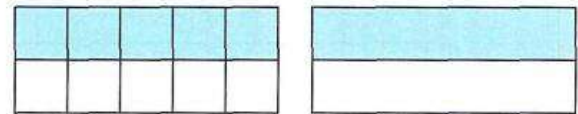
$$\frac{\quad}{\quad} = \frac{\quad}{\quad}$$

c.



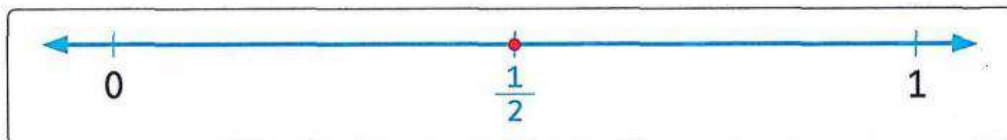
$$\frac{\quad}{\quad} = \frac{\quad}{\quad}$$

d.

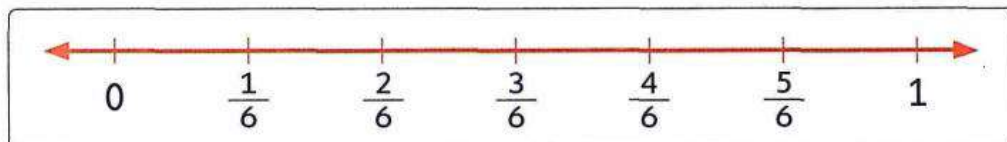


$$\frac{\quad}{\quad} = \frac{\quad}{\quad}$$

Find the equivalent fraction of $\frac{1}{2}$. Show the equivalent fraction on the number line.

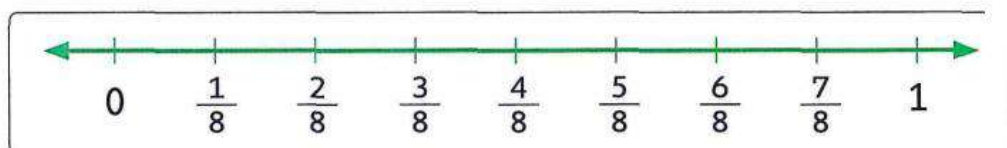


a.



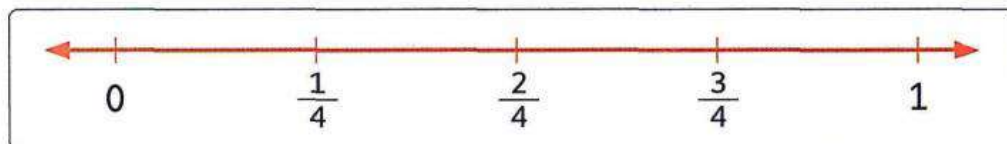
$$\frac{1}{2} = \frac{\quad}{6}$$

b.



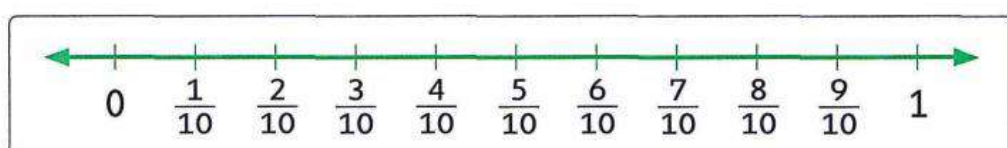
$$\frac{1}{2} = \frac{\quad}{\quad}$$

c.



$$\frac{1}{2} = \frac{\quad}{\quad}$$

d.



$$\frac{1}{2} = \frac{\quad}{\quad}$$

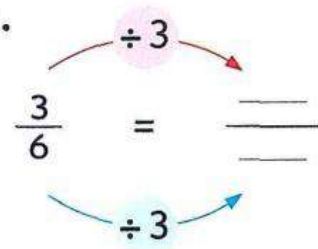
Complete.

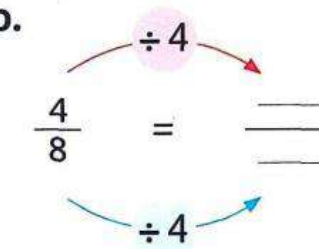
g. $\frac{5}{10} = \frac{\quad}{2}$

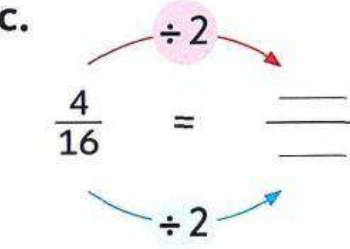
h. $\frac{9}{18} = \frac{1}{\quad}$

i. $\frac{2}{4} = \frac{1}{\quad}$

Complete to find equivalent fractions.

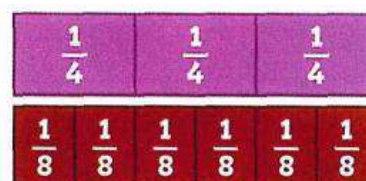
a. $\frac{3}{6} = \frac{\quad}{\quad}$


b. $\frac{4}{8} = \frac{\quad}{\quad}$


c. $\frac{4}{16} = \frac{\quad}{\quad}$


Complete. You may use fraction strips to help.

a. 
 $\frac{1}{2} = \frac{\quad}{6}$

b. 
 $\frac{3}{4} = \frac{\quad}{8}$

c. 
 $\frac{1}{4} = \frac{\quad}{8}$

Color and write the equivalent fraction.

a. 
 $\frac{2}{3} = \frac{\quad}{\quad}$

b. 
 $\frac{1}{2} = \frac{\quad}{\quad}$

Write four equivalent fractions to the given fractions.

a. $\frac{1}{2} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

b. $\frac{2}{6} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$

Complete.

a. $\frac{2}{3} = \frac{\quad}{15}$

b. $\frac{1}{4} = \frac{\quad}{16}$

c. $\frac{\quad}{5} = \frac{12}{20}$

d. $\frac{6}{8} = \frac{3}{\quad}$

e. $\frac{7}{\quad} = \frac{14}{16}$

f. $\frac{2}{7} = \frac{\quad}{21}$

Complete the fractions

a. $\frac{2}{3} = \frac{\quad}{6} = \frac{6}{\quad} = \frac{\quad}{12}$

b. $\frac{3}{5} = \frac{\quad}{10} = \frac{9}{\quad} = \frac{12}{\quad}$

c. $\frac{2}{7} = \frac{4}{\quad} = \frac{\quad}{21} = \frac{\quad}{28}$

d. $\frac{1}{8} = \frac{2}{\quad} = \frac{\quad}{24} = \frac{\quad}{32}$

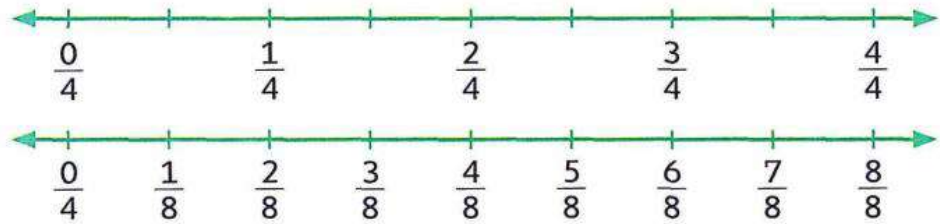


Lesson (4)

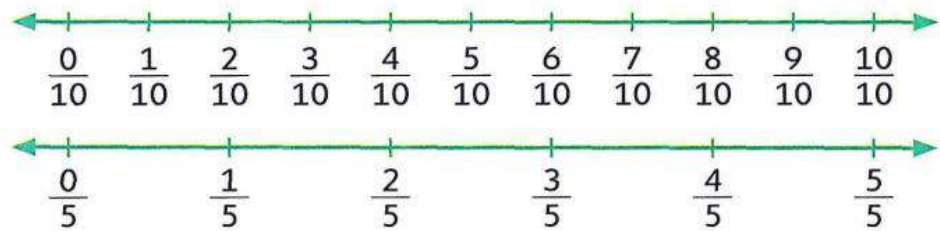
Equivalent Fractions with the Number Line

Write the equivalent fraction to each of the following using the number line.

a. $\frac{3}{4} =$



b. $\frac{4}{10} =$



Lesson (5)

Applications on Equivalent Fractions

Habiba and Hatem both had 1 liter of juice.

Habiba said that her family drank $\frac{2}{4}$ of the liter.

Hatem said his family drank the same amount.

If Hatem measured his amount in eighths.

How much juice did his family drink ? _____



Jana and Menna each made a large pizza for dinner both pizzas were the same size. Jana's pizza was cut into sixths and Menna's pizza was cut into twelfths. Jana ate $\frac{2}{6}$ of her pizza. If Menna wants to eat the same amount of pizza as Jana.

How many slices of pizza will she have to eat ? _____



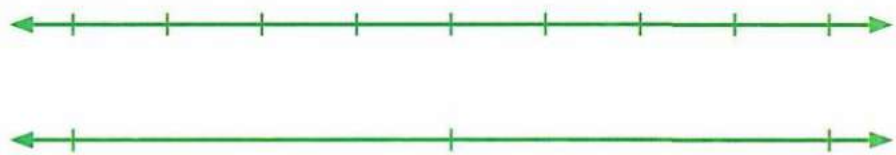
HOMEWORK

Write the equivalent fraction to each of the following using the number lines.

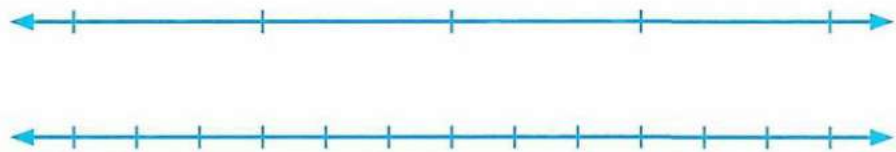
a. $\frac{1}{3} = \frac{\quad}{\quad}$



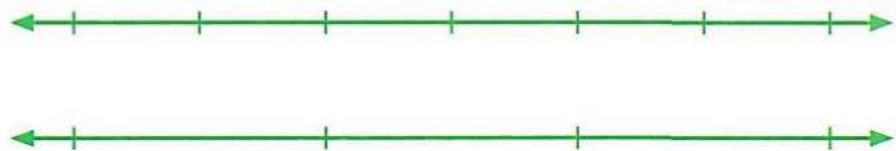
b. $\frac{4}{8} = \frac{\quad}{\quad}$



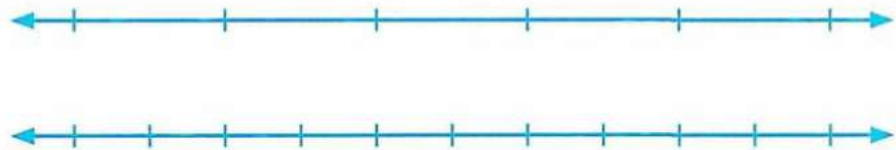
c. $\frac{3}{4} = \frac{\quad}{\quad}$



d. $\frac{4}{6} = \frac{\quad}{\quad}$



e. $\frac{3}{5} = \frac{\quad}{\quad}$



Moutaz and Kamal were eating same-sized cakes. Moutaz's cake was cut into thirds and Kamal's cake was cut into sixths. Moutaz ate 2 slices of his cake. What fraction of his cake does Kamal have to eat to be the same amount as Moutaz ? _____



Lesson (6)

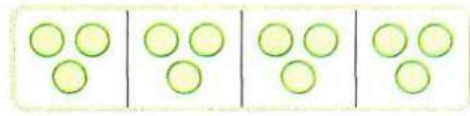
Dividing Using the Bar Models

Write a division equation for each bar model. Write the quotient as the example.

Example:

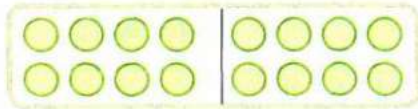
Division equation : $6 \div 3 = 2$

The quotient = 2

a.

Division equation : _____ $\div$ _____ = _____

The quotient = _____

b.

Division equation : _____ $\div$ _____ = _____

The quotient = _____

c.

Division equation : _____ $\div$ _____ = _____

The quotient = _____

Lesson (7)

Story Problems on Division

I have 20 figs to divide evenly between 4 plates.

How many figs should I put on each plate ?

Work area

20

--	--	--	--

_____ $\div$ _____ = _____ _____ figs



There are 28 crayons in the classroom that need to be placed in 4 cups.

Each cup must have the same number of crayons.

How many crayons will be in each cup ?

Work area

28

--

_____ $\div$ _____ = _____ _____ crayons

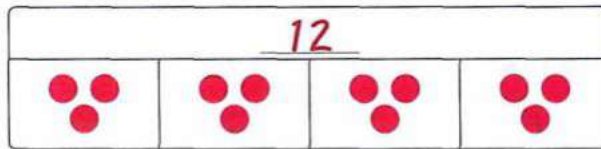


HOMEWORK

Draw dots to find the quotient as the example.

Example:

$$12 \div 4$$



The quotient = 3

a.

$$12 \div 6$$

The quotient = _____

b.

$$8 \div 2$$

The quotient = _____

c.

$$15 \div 5$$

The quotient = _____

d.

$$16 \div 4$$

The quotient = _____

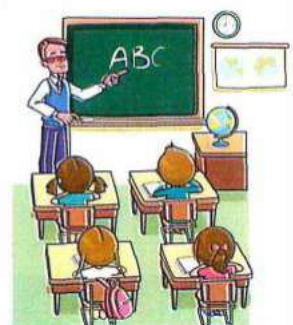
Omar has 18 pieces of candy. He wants to give the same amount to each of his 6 friends. **How many pieces would each friend get ?**

Work area

18

--

_____ ÷ _____ = _____ candies



Diaa placed 40 marbles in rows of 5. How many rows did he make ?

Work area

40

_____ ÷ _____ = _____ rows



Omnia studied 14 hours. If she studied 2 hours each day. How many days did she study ?

Work area

14

_____ ÷ _____ = _____ days



Diaa has 36 toys he would like to split evenly among 6 friends. How many toys should each friend receive ?

Work area

36

_____ ÷ _____ = _____ toys



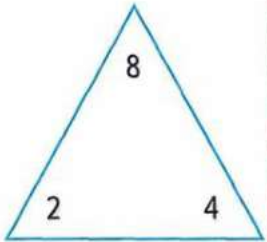
Lesson (8)

The Relation between Multiplication and Division

Write the fact family for each set of numbers in each triangle as the example.

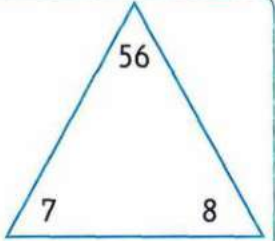
Example:

$2 \times 4 = 8$
 $4 \times 2 = 8$
 $8 \div 2 = 4$
 $8 \div 4 = 2$



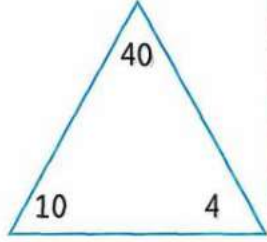
a.

$_ \times _ = _$
 $_ \times _ = _$
 $_ \div _ = _$
 $_ \div _ = _$



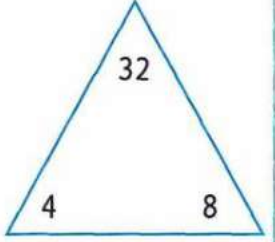
b.

$_ \times _ = _$
 $_ \times _ = _$
 $_ \div _ = _$
 $_ \div _ = _$



c.

$_ \times _ = _$
 $_ \times _ = _$
 $_ \div _ = _$
 $_ \div _ = _$



Choose 3 numbers then write the fact families:

5 9 2 11 45

$\dots \times \dots = \dots$
 $\dots \times \dots = \dots$
 $\dots \div \dots = \dots$
 $\dots \div \dots = \dots$

30 6 3 7 10

$\dots \times \dots = \dots$
 $\dots \times \dots = \dots$
 $\dots \div \dots = \dots$
 $\dots \div \dots = \dots$

9 4 32 5 8

$\dots \times \dots = \dots$
 $\dots \times \dots = \dots$
 $\dots \div \dots = \dots$
 $\dots \div \dots = \dots$

7 2 12 5 10

$\dots \times \dots = \dots$
 $\dots \times \dots = \dots$
 $\dots \div \dots = \dots$
 $\dots \div \dots = \dots$



Complete the fact families:

5

9

.....

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$

30

6

.....

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$

6

9

.....

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$

8

4

.....

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$

3

7

.....

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$

2

5

.....

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$



Complete the fact families:



The factors are: and

The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$



The factors are: and

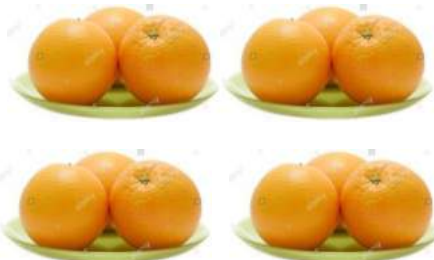
The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$



The factors are: and

The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$



The factors are: and

The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$

HOMEWORK

Choose which number equations is not included in the same fact family.

a. $7 \times 4 = 28$

☐ $28 \div 7 = 4$

☐ $5 \times 7 = 35$

☐ $28 \div 4 = 7$

b. $18 \div 3 = 6$

☐ $18 \div 6 = 3$

☐ $3 \times 6 = 18$

☐ $9 \times 2 = 18$

c. $42 \div 7 = 6$

☐ $7 \times 6 = 42$

☐ $6 \times 7 = 42$

☐ $30 \div 5 = 6$

Complete.

a. If $3 \times 5 = 15$, then $15 \div \underline{\hspace{2cm}} = 3$ and $15 \div \underline{\hspace{2cm}} = 5$

b. If $10 \div 2 = 5$, then $\underline{\hspace{2cm}} \times 5 = 10$ and $\underline{\hspace{2cm}} \times 2 = 10$

Complete the fact families:

5

10

.....

..... $\times$ =

..... $\times$ =

..... $\div$ =

..... $\div$ =

7

9

.....

..... $\times$ =

..... $\times$ =

..... $\div$ =

..... $\div$ =

5

7

.....

..... $\times$ =

..... $\times$ =

..... $\div$ =

..... $\div$ =

10

2

.....

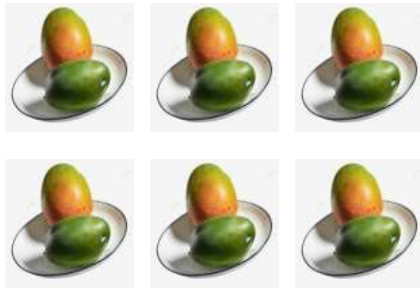
..... $\times$ =

..... $\times$ =

..... $\div$ =

..... $\div$ =

Complete the fact families:



The factors are: and

The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$



The factors are: and

The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$



The factors are: and

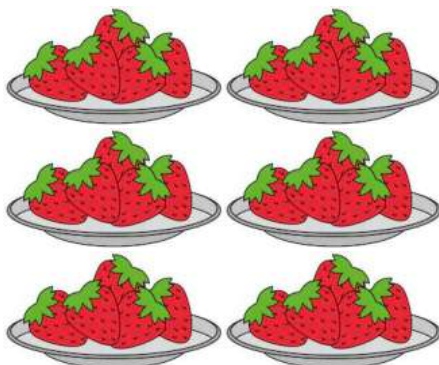
The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$



The factors are: and

The facts are:

$$\dots \times \dots = \dots$$

$$\dots \times \dots = \dots$$

$$\dots \div \dots = \dots$$

$$\dots \div \dots = \dots$$

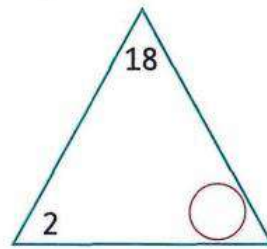


Lesson (2)

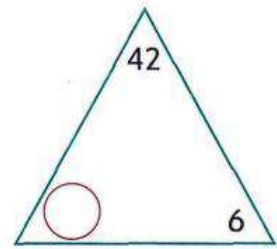
Story Problems on Multiplication and Division

Determine the missing number in each equation.

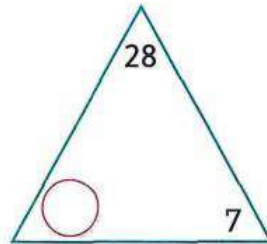
$2 \times \square = 18$



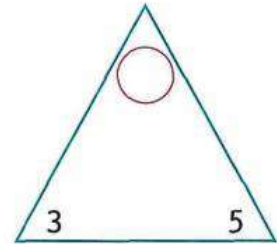
$\square \times 6 = 42$



$28 \div \square = 7$



$\square \div 3 = 5$

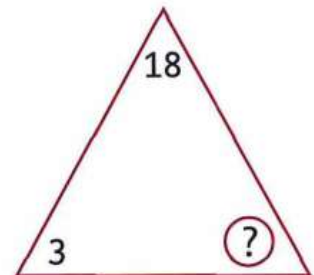


Solve the problem using fact family triangle.

Sylvia wants to distribute 18 apples among 3 boxes.

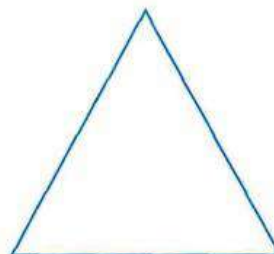
How many apples in each box ?

Problem equation :



Omar studies 4 hours every day.

How many hours does he spend in studying for 9 days ?



Lesson (3)

Creating Story Problems on Multiplication

Write a multiplication story problem that could be represented by the equation shown. Solve the problem to show the result.

$$7 \times 4 = \square$$

Lesson (4)

Creating Story Problems on Division

Write a division story problem that could be represented by the equation shown. Solve the problem to show the result.

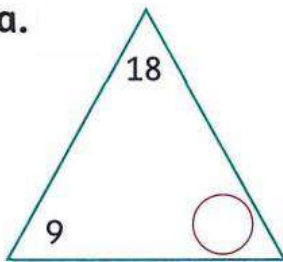
$$24 \div 6 = \square$$



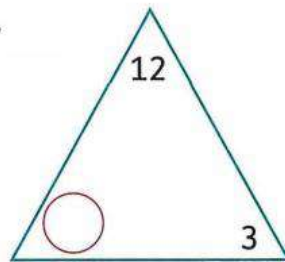
HOMEWORK

For each of the following triangles. Determine the unknown and record it.

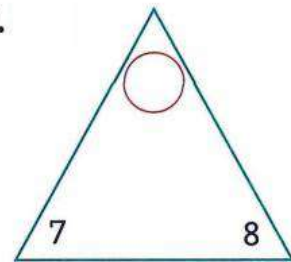
a.



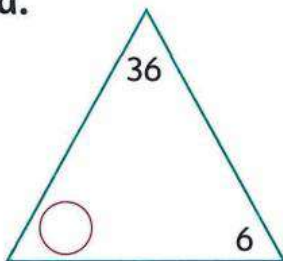
b.



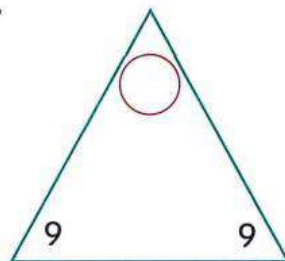
c.



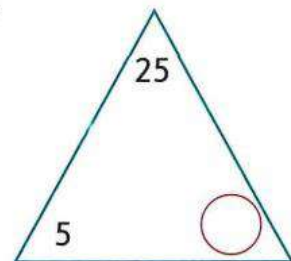
d.



e.

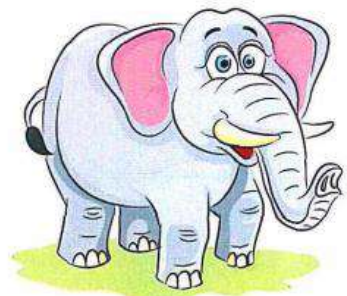
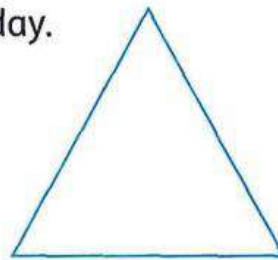


f.



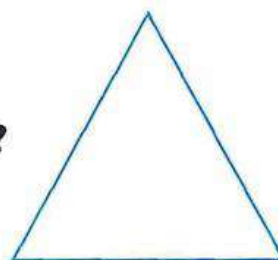
There are 9 elephants at the zoo.
Each elephant eats 2 bales of hay in a day.

How many bales of hay does the zookeeper need to feed all 9 elephants for one day ?



Adam baked 24 cookies. He gives a bag to 8 of his friends.

How many cookies are in each bag ?



Write a multiplication story problem that could be represented by the equation shown. Solve the problem to show the result.

$$8 \times 9 = \square$$

Write a division story problem that could be represented by the equation shown. Solve the problem to show the result.

$$20 \div 5 = \square$$

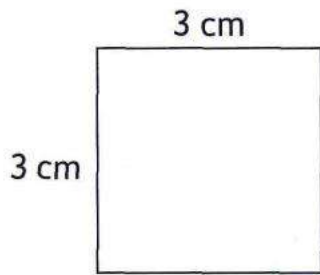


Lesson (5)

Story Problems on the Perimeter and the Area

Calculate the perimeter and the area of each figure.

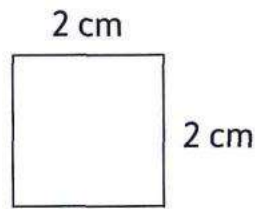
a.



Perimeter = _____

Area = _____

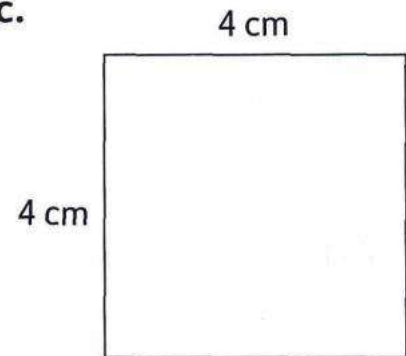
b.



Perimeter = _____

Area = _____

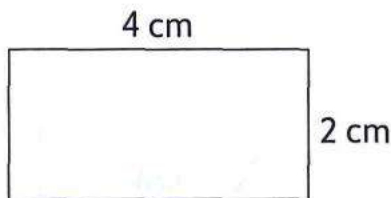
c.



Perimeter = _____

Area = _____

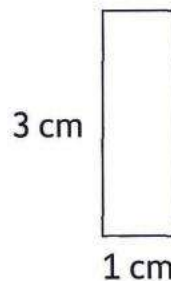
d.



Perimeter = _____

Area = _____

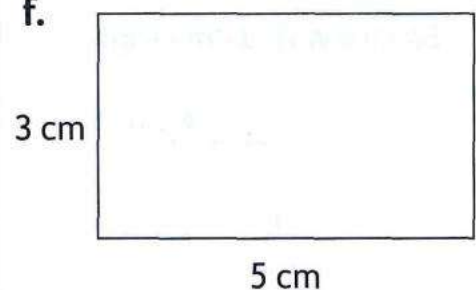
e.



Perimeter = _____

Area = _____

f.



Perimeter = _____

Area = _____

Omar measured his garden, and it is 3 meters wide and 4 meters long. Draw a sketch of Omar's garden and label the dimensions. Find the area of Omar's garden and record your findings below. Then, find the perimeter of Omar's garden and record your findings below. Remember to label your answers.

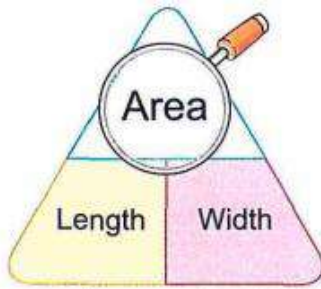
What is the area of Omar's garden ?

What is the perimeter of Omar's garden ?

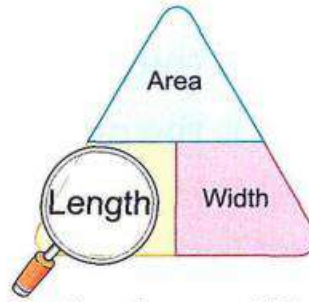


Lesson (6)

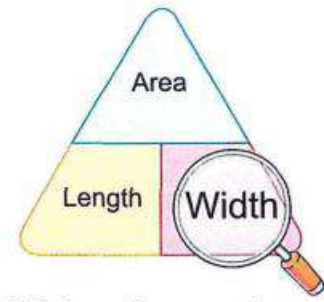
The Perimeter for a Given Area and a Side Length



$$\text{Area} = \text{Length} \times \text{Width}$$



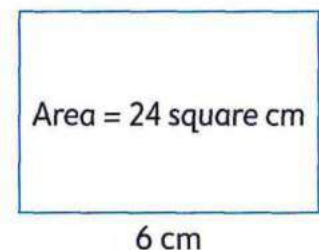
$$\text{Length} = \text{Area} \div \text{Width}$$



$$\text{Width} = \text{Area} \div \text{Length}$$

A rectangle of area 20 square cm, and its length is 5 cm.
What is its perimeter ? (Think : $\text{Width} = \text{Area} \div \text{Length}$)

Perry drew the opposite rectangle.
Calculate the perimeter of Perry's rectangle.

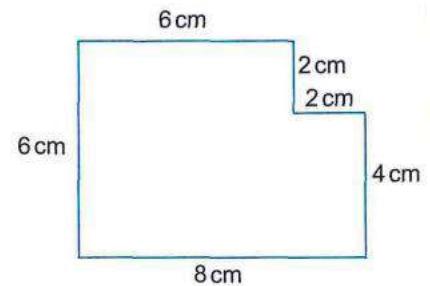


Ali sketch a rectangular painting with an area of 28 square cm
The width of his painting is 4 cm. Sketch Ali's painting.
Find the length of his painting, then calculate the perimeter.

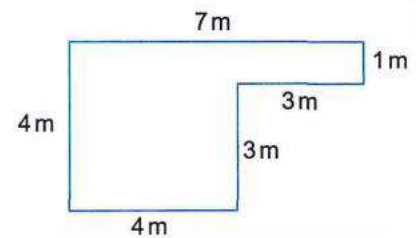
Lesson (7)

Applications on the Perimeter and the Area

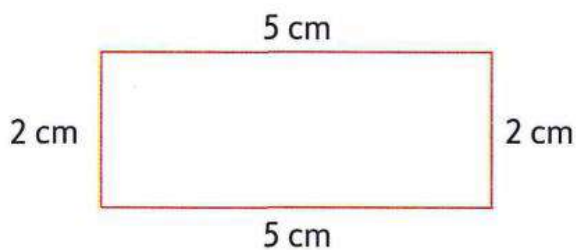
Use your preferred way to find the perimeter and the area of the opposite figure.



Use your preferred way to find the perimeter and the area of the opposite figure.

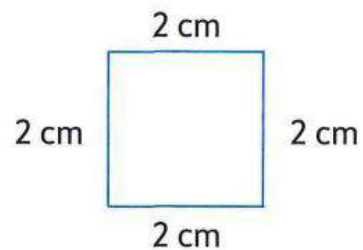


HOMEWORK



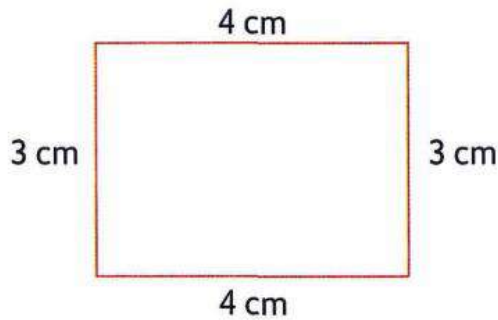
Perimeter = _____

Area = _____



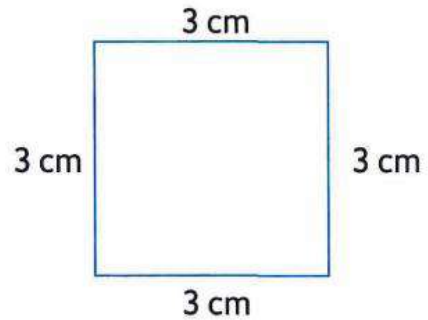
Perimeter = _____

Area = _____



Perimeter = _____

Area = _____



Perimeter = _____

Area = _____

Gehad drew a square that has side lengths of 8 cm
Sketch Gehad's square.

What is the perimeter of the square ?

What is the area of the square ?



Jaida sketched a rectangular painting with an area of 56 square cm
The length of her painting is 8 cm. Sketch Jaida's painting.

Find the width of the painting, then calculate the perimeter.

Taha made a tiny rectangular painting with an area of 72 square cm
The width of his painting is 9 cm

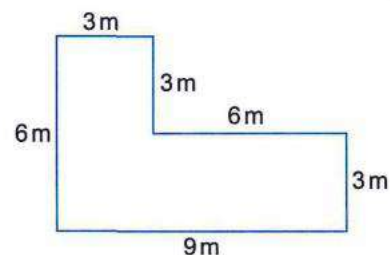
Sketch Taha's painting.

What is the length of his painting ?

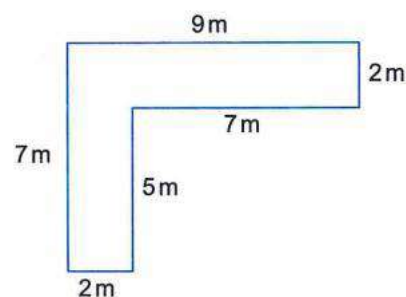
What is the perimeter of his painting ?



Use your preferred way to find the perimeter and the area of the opposite figure.



Use your preferred way to find the perimeter and the area of the opposite figure.



Chapter (12)

Elapsed Time

The diagram illustrates the calculation of elapsed time. It features two blue alarm clocks. The left clock shows 2:30, labeled 'Start: 2:30'. The right clock shows 4:45, labeled 'End: 4:45'. A speech bubble between them states 'Elased Time = 2 hours 15 minutes'. Below the clocks is a timeline starting at 2:30 and ending at 4:45. The timeline has markers at 2:30, 3:00, 4:00, and 4:45. The interval from 2:30 to 3:00 is labeled '+30 min', and the interval from 3:00 to 4:00 is labeled '+30 hour'. At the bottom, a girl points to a digital watch showing 10:15 AM, and a boy points to a digital watch showing 11:50 AM. The entire illustration is set against a dark background with various time-related icons like stars, moons, and clocks.

Start: 2:30

Elased Time = 2 hours 15 minutes

End: 4:45

2:30 | 3:00 | 4:00 | 4:45

+30 min +30 hour

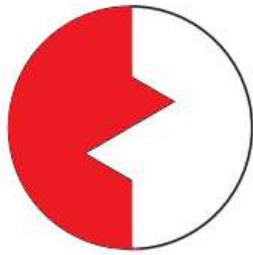
10:15 AM

11:50 AM

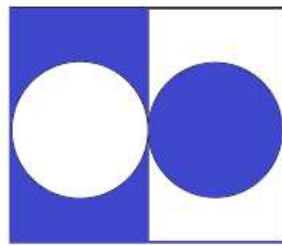
Lesson (1)

Creating Halves with Non-Routine Way

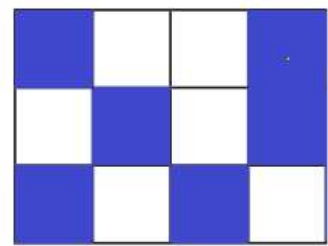
Put (✓) under shapes that show one **half** is shaded:



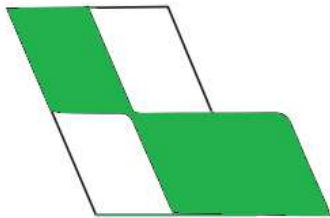
()



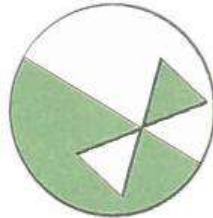
()



()



()



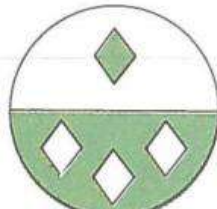
()



()



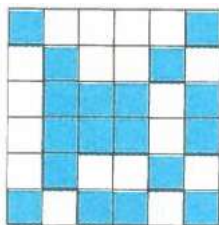
()



()



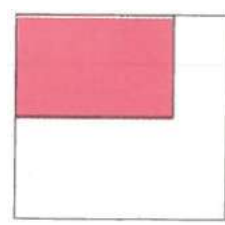
()



()



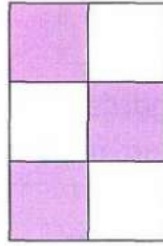
()



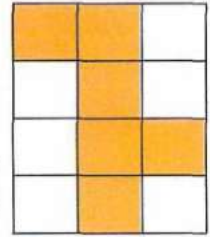
()

Complete the following and write the fraction which represents the colored figure.

a.

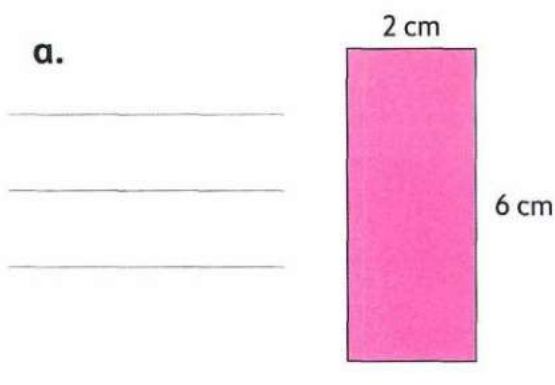
1. Number of all parts = 2. Number of colored parts = 3. Number of uncolored parts = 4. The fraction which represents the colored figure = 

b.

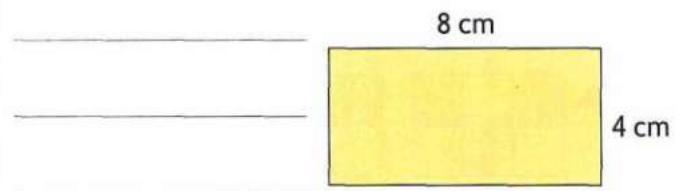
1. Number of all parts = 2. Number of colored parts = 3. Number of uncolored parts = 4. The fraction which represents the colored figure = 

Find the half of area of each of the following rectangles.
Choose the way you preferred.

a.



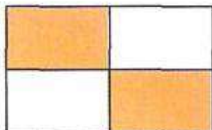
b.



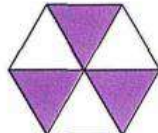
HOMEWORK

Circle the shapes below that show one-half colored.

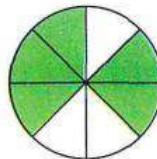
a.



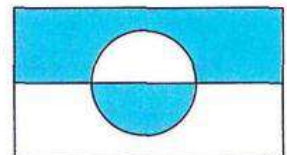
b.



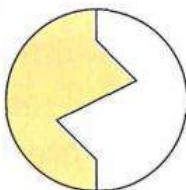
c.



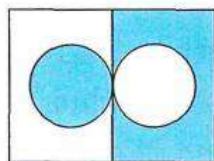
d.



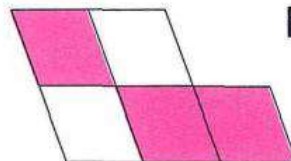
e.



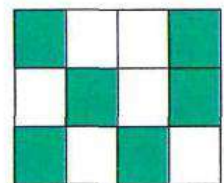
f.



g.

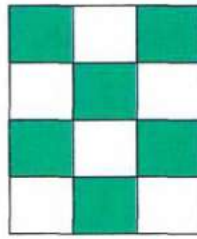


h.

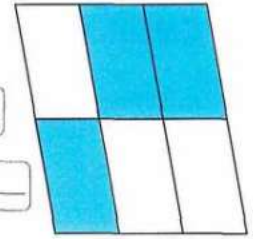


Complete the following and write the fraction which represents the colored figure.

a.

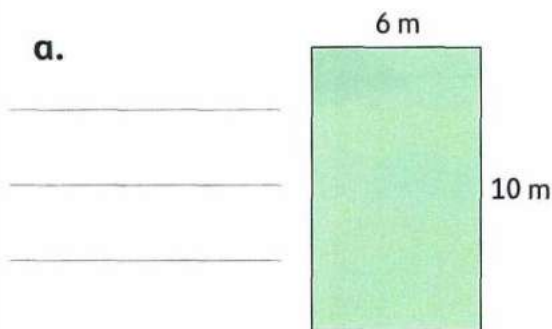
1. Number of all parts = 2. Number of colored parts = 3. Number of uncolored parts = 4. The fraction which represents the colored figure = 

b.

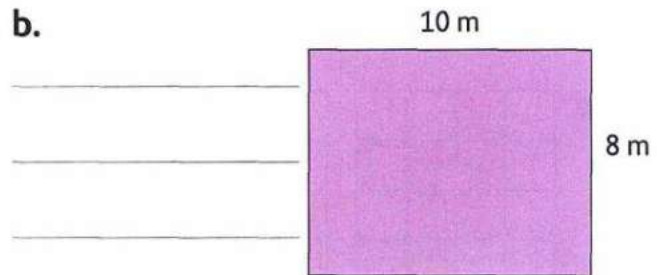
1. Number of all parts = 2. Number of colored parts = 3. Number of uncolored parts = 4. The fraction which represents the colored figure = 

Find the half of area of each of the following rectangles.
Choose the way you preferred.

a.



b.



Lesson (2)

Ordering Fractions Using the Number Line

Put the following fractions on the number line.

a. $\frac{1}{3}$, $\frac{1}{6}$, $\frac{4}{6}$, $\frac{3}{6}$ b. $\frac{1}{5}$, $\frac{3}{10}$, $\frac{5}{10}$, $\frac{4}{4}$ c. $\frac{1}{3}$, $\frac{3}{6}$, $\frac{2}{3}$, $\frac{0}{5}$ 

Lesson (3)

Applications on Numbers

Remember: ones, tens, hundreds, thousands

Write the place value of the red digit:

A	67 511	→	.....
B	893 052	→	.....
C	715 980	→	.....
D	821 374	→	.....
E	501 234	→	.....

Write the value of the red digit:

A	67 511	→	.....
B	893 052	→	.....
C	715 980	→	.....
D	821 374	→	.....
E	501 234	→	.....

Write the **expanded** form as the example:

A	67 511 = 1 + 10 + 500 + 7 000 + 60 000
B	893 052 = + + + + +
C	715 980 = + + + + +
D	821 374 = + + + + +
E	501 234 = + + + + +

Form the **greatest** and the **smallest** number:

4 **1** **8** **3** **4** **6**

The **greatest** number:

The **Smallest** number:

9 **5** **4** **8** **3** **6**

The **greatest** number:

The **Smallest** number:

Rearrange the digits to get the greatest number and the least number from the given digits.

a. 3 4 6 2 9
greatest : least :

b. 2 1 1 7 6
greatest : least :

c. 6 4 0 8 1
greatest : least :

d. 6 9 7 0 2 4
greatest : least :

Write the numbers in order from least to greatest.

a. 61,734 6,950 61,850 116,658

The order is : _____ , _____ , _____ , _____

b. 561,248 91,234 74,005 9,706

The order is : _____ , _____ , _____ , _____

Write the numbers in order from greatest to least.

a. 22,012 8,234 14,235 109,010

The order is : _____ , _____ , _____ , _____

b. 37,309 8,562 37,903 4,298

The order is : _____ , _____ , _____ , _____



HOMEWORK

Put the following fractions on the number line.

a. $\frac{2}{8}$, $\frac{7}{8}$, $\frac{3}{4}$, $\frac{3}{6}$



b. $\frac{6}{6}$, $\frac{3}{5}$, $\frac{1}{10}$, $\frac{1}{2}$



c. $\frac{1}{6}$, $\frac{2}{6}$, $\frac{4}{4}$, $\frac{4}{6}$



Write the value and place value of the colored digit.

	place value	value
a. 4 2 ,517		
c. 5 80,609		
e. 31,9 8 4		
g. 6 3,810		
i. 85,0 0 2		

	place value	value
b. 10 4 ,728		
d. 6 0 0,006		
f. 5,1 2 8		
h. 710,0 1 4		
j. 2, 7 39		

Rearrange the digits to get the greatest number and the least number from the given digits.

a. 3 1 4 2
greatest : least :

b. 8 9 1 4
greatest : least :

c. 0 7 4 5
greatest : least :

d. 7 3 0 9
greatest : least :

Write the numbers in order from least to greatest.

a. 345,010 543,100 354,010 345,001

The order is : _____ , _____ , _____ , _____

b. 34,170 599 35,005 9,730 705,662

The order is : _____ , _____ , _____ , _____ , _____

Write the numbers in order from greatest to least.

a. 100,701 99,358 100,702 8,359 98,781

The order is : _____ , _____ , _____ , _____ , _____

b. 80,499 801 8,941 801,014 80,949

The order is : _____ , _____ , _____ , _____ , _____

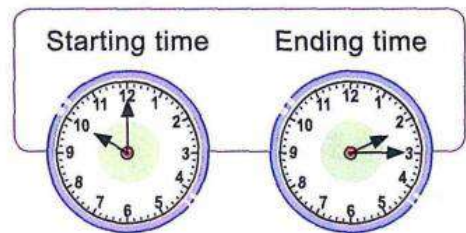
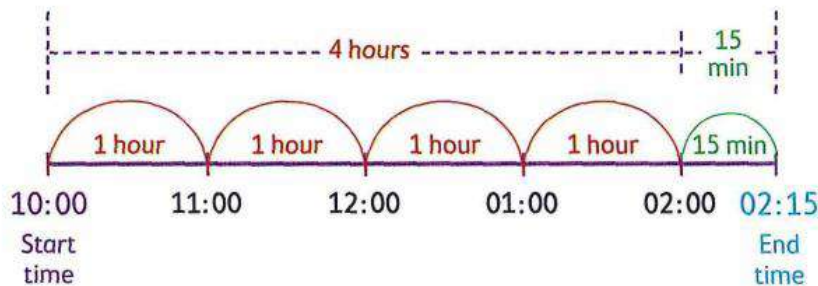
Lesson (4)

Elapsed Time

Example 1

Sara arrived at the mall at 10:00 A.M.
She leaved the mall at 02:15 P.M.

How long did she spend at the mall ?



A.M. means
"before noon."
P.M. means
"after noon."

So, Sara spent 4 hours and 15 minutes.

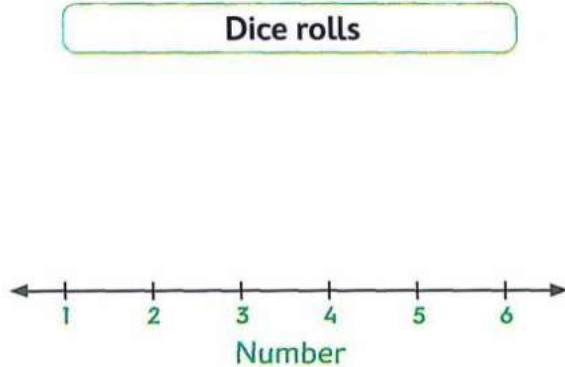
Write the elapsed time:

	Start time	End time	Elapsed time
A	4:00 a.m.	7:30 a.m.	.....
B	5:30 p.m.	9:30 p.m.	.....
C	3:15 a.m.	8:00 a.m.	.....
D	11:30 a.m.	9:30 p.m.	.....
E	5:20 p.m.	12:30 a.m.	.....
F	4:00 p.m.	6:30 p.m.	.....
G	9:30 a.m.	4:30 p.m.	.....
H	10:15 p.m.	4:15 a.m.	.....

Lesson (5)

Applications on Data Representations

- 1 The following table shows the roll of dice 35 times. Represent the data by a line plot.



Key
Each X
= _____ time

Dice rolls		
Number	Tally	Times
1	||||	6
2	||||	5
3	|||||	9
4	|||||	8
5	|||	3
6	||||	4

- Answer the following questions :

- Which number is rolled the most ? _____
- Which number is rolled the least ? _____
- How many times shows an even number ? _____
- How many times shows an odd number ? _____
- What is the difference between the total even rolls and total odd rolls ? _____

Even number such as :
0, 2, 4, 6, 8, _____

Odd number such as :
1, 3, 5, 7, 9, _____

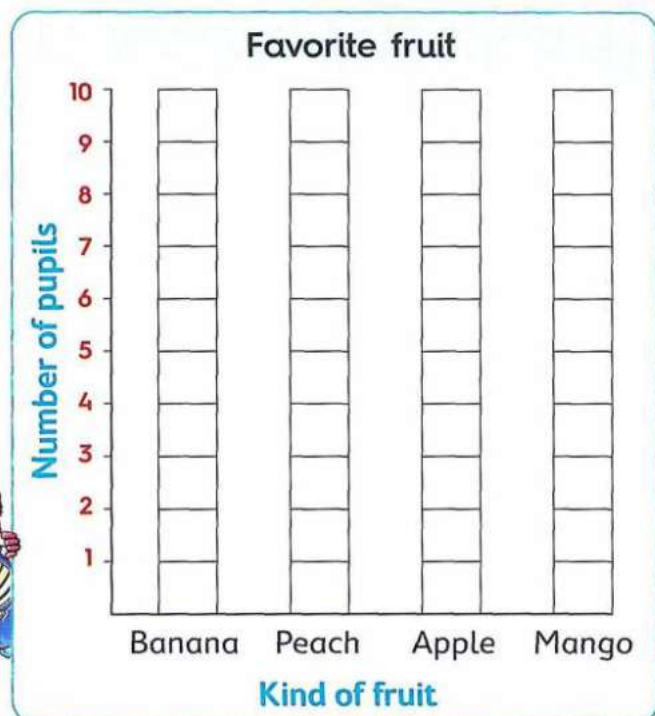


- 2 The following tally table shows the class favorite fruit, complete the table. Represent these data by a bar graph.

Favorite fruit		
Fruit	Tally	Number
Banana	|||||	_____
Peach	||||	_____
Apple	|||||	_____
Mango	||||	_____

- Answer the following questions :

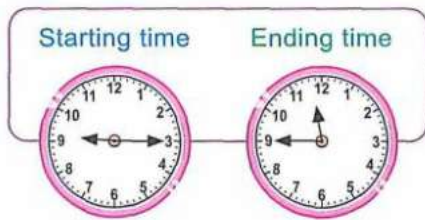
- Which fruit is liked the most ? _____
- Which fruit is liked the least ? _____
- How many more pupils liked banana than mango ? _____



HOMEWORK

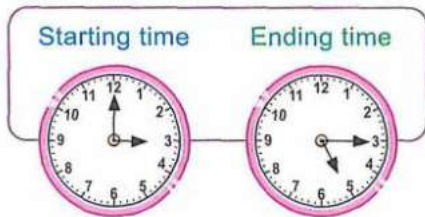
Use each analog clock to find the elapsed time.

a.



Elapsed time

b.



Elapsed time

Write the elapsed time:

	Start time	End time	Elapsed time
A	07:25	09:30	.....
B	03:15	06:45	.....
C	11:05	04:30	.....
D	01:55	08:25	.....

Complete the table, represent the data by a line plot.

Ages of children in karate class



key Each **x** represents _____

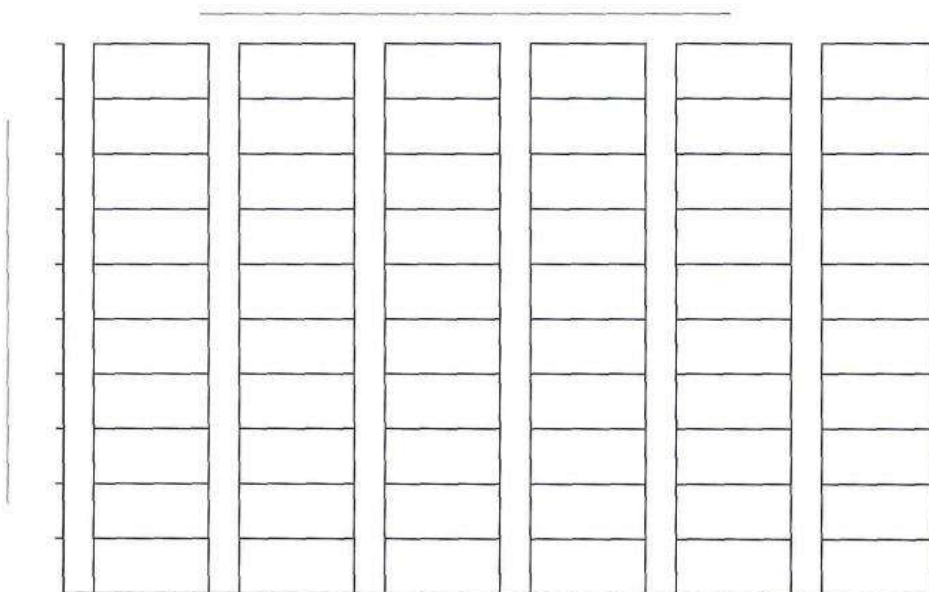
Ages of children in karate class

Age in years	Tally	Number
7	||	_____
8	||||	_____
9	||	_____
10	||||	_____
11	|||	_____
12	||	_____

Answer the following questions :

- How many children in the class are 11 years ? _____ children.
- What age is the greatest number of children ? _____ years old.
- How many children are even years old ? _____ children.
- How many children are in karate class in all ? _____ children.

Represent the data by a bar graph.



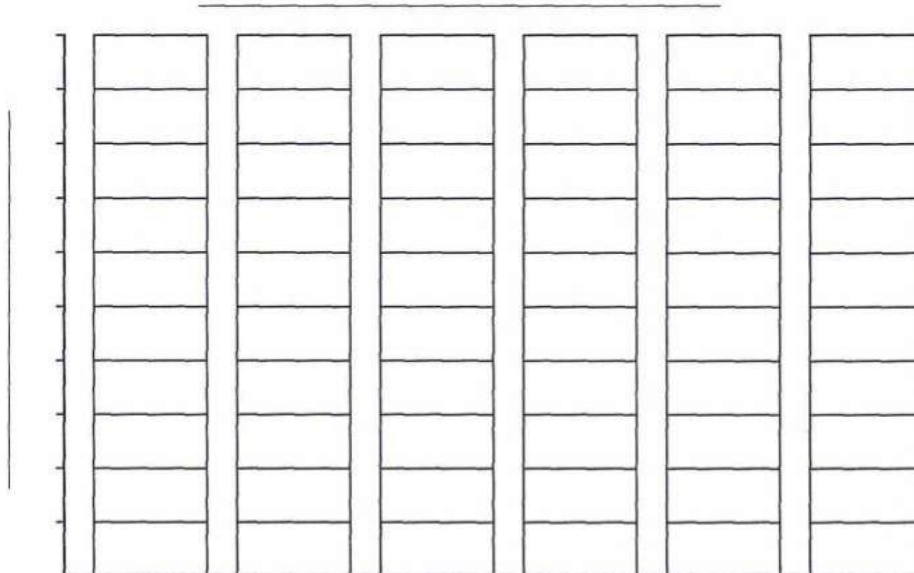
Complete the table, represent the data by a line plot.



key Each **x** represents _____

Players' ages of football team		
Age in years	Tally	Number
22	|||	_____
23	|||| |	_____
24	|||| |	_____
25	|||| |	_____
26	||	_____
27	|||	_____

• Represent the data by bar graph :



○ Answer the following questions :

- How many players are 25 years old ? _____
- Which age has the greatest number of players ? _____
- How many players are younger than 26 years old ? _____
- How many players are in the football team ? _____

